

BIBLIOGRAPHY

1997 Conference on the Dynamics of Molecular Collisions (Cragun's Conference Center on Gull Lake, Brainerd MN, July 20-25, 1997).

Abramowitz, M., and I. A. Stegun, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, 7th printing (National Bureau of Standards, Washington D.C., 1968).

Albritton, D. L., in *Kinetics of Ion-Molecule Reactions*, edited by P. Ausloos (Plenum, New York, 1979).

Albritton, D. L., I. Dotan, W. Lindinger, M. McFarland, J. Tellinghuisen, and F. C. Fehsenfeld, *J. Chem. Phys.* **66**, 410 (1977).

Alder, H. L., and E. B. Roessler, *Introduction to Probability and Statistics*, Third Edition (W. H. Freeman, San Francisco, 1964).

Alexander, M. H., P. J. Dagdigian, and A. E. DePristo, *J. Chem. Phys.* **66**, 59 (1977).

Alexander, M. H., and S. L. Davis, *J. Chem. Phys.* **78**, 6754 (1983).

Altkorn, R., and R. N. Zare, *Annu. Rev. Phys. Chem.* **35**, 265 (1984).

Altkorn, R., R. N. Zare, and C. H. Greene, *Mol. Phys.* **55**, 1 (1985).

Advanced Micro Devices, *Am 9513A/Am 9513 System Timing Controller Technical Manual* (Advanced Micro Devices, Inc., Sunnyvale CA, 1985).

Aquilanti, V., D. Ascenzi, D. Cappelletti, R. Fedeli, and F. Pirani, *J. Phys. Chem. A* **101**, 7648 (1997).

Aquilanti, V., D. Ascenzi, D. Cappelletti, S. Franceschini, and F. Pirani, *Phys. Rev. Lett.* **74**, 2929 (1995).

Aquilanti, V., D. Ascenzi, D. Cappelletti, and F. Pirani, *J. Phys. Chem.* **99**, 13620 (1995).

Aquilanti, V., D. Ascenzi, D. Cappelletti, and F. Pirani, *Nature (London)* **371**, 399 (1994).

Aquilanti, V., L. Beneventi, G. Grossi, and F. Vecchiocattivi, *J. Chem. Phys.* **89**, 751 (1988).

Arthurs, A. M., and A. Dalgarno, *Proc. R. Soc. London, Ser. A* **256**, 540 (1960).

- Atkins, P. W., *Physical Chemistry*, 3rd Edition (W. H. Freeman, New York, 1985).
- Bashkin, S., and J. O. Stoner, Jr., *Atomic Energy Levels and Grotrian Diagrams, Vol I: H I to Phosphorus XV* (Elsevier, New York, 1975).
- Bastian, M. J., C. P. Lauenstein, V. M. Bierbaum, and S. R. Leone, *J. Chem. Phys.* **98**, 9496 (1993).
- Bastian, M. J., Ph. D. Thesis, University of Colorado (1994).
- Beenakker, J. J. M., and F. R. McCourt, *Annu. Rev. Phys. Chem.* **21**, 47 (1970).
- Berning, A., and H.-J. Werner, *J. Chem. Phys.* **100**, 1953 (1994).
- Bernstein, R. B., editor, *Atom-Molecule Collision Theory: A Guide for the Experimentalist* (Plenum Press, New York, 1979).
- Bethe, H. A., and E. E. Salpeter, *Quantum Mechanics of One and Two Electron Atoms* (Springer-Verlag, Berlin, 1957).
- Bevington, P. R., *Data Reduction and Error Analysis for the Physical Sciences* (McGraw-Hill, New York, 1969).
- Blum, K., *Density Matrix, Theory and Applications* (Plenum Press, New York, 1981).
- Boas, M. L., *Mathematical Methods in the Physical Sciences*, Second Edition (John Wiley & Sons, New York, 1983).
- Borysow, J., and A. V. Phelps, *Phys. Rev. E* **50**, 1399 (1994).
- Boudjarane, K., J. Lacoursiere, and M. Larzilliere, *J. Chem. Phys.* **101**, 10274 (1994).
- Boudjarane, K., J.-T. Shy, and M. Larzilliere, *J. Phys. Chem. A* **101**, 6712 (1997).
- Bracewell, R. N., *The Fourier Transform and its Applications*, 2nd ed. revised (McGraw-Hill, New York, 1986).
- Chapman, W. B., M. J. Weida, and D. J. Nesbitt, *J. Chem. Phys.* **106**, 2248 (1997).
- Cline, J. I., C. A. Taatjes, and S. R. Leone, *J. Chem. Phys.* **93**, 6543 (1990).
- Coe, D., F. Robben, and L. Talbot, *J. Opt. Soc. Am.* **70**, 1238 (1980).

de Gouw, J. A., L. N. Ding, M. Krishnamurthy, H. S. Lee, E. B. Anthony, V. M. Bierbaum, and S. R. Leone, *J. Chem. Phys.* **105**, 10398 (1996).

Demtroder, W., *Laser Spectroscopy*, 2nd corrected printing (Springer-Verlag, New York, 1982).

Den Hartog, E. A., H. Persing, and R. C. Woods, *Appl. Phys. Lett.* **57**, 661 (1990).

Dressler, R. A., J. P. M. Beijers, H. Meyer, S. M. Penn, V. M. Bierbaum, and S. R. Leone, *J. Chem. Phys.* **89**, 4707 (1988).

Dressler, R. A., H. Meyer, and S. R. Leone, *J. Chem. Phys.* **87**, 6029 (1987).

Drullinger, R. E., and R. N. Zare, *J. Chem. Phys.* **51**, 5532 (1969).

Druyvesteyn, M. J., and F. M. Penning, *Rev. Mod. Phys.* **12**, 87 (1940).

Duncan, M. A., V. M. Bierbaum, G. B. Ellison, and S. R. Leone, *J. Chem. Phys.* **79**, 5448 (1983).

Ellis, H. W., R. Y. Pai, E. W. McDaniel, E. A. Mason, and L. A. Viehland, *Atom. Data Nuc. Data Tables* **17**, 177 (1976).

Feofilov, P. P., *The Physical Basis of Polarized Emission* (Consultants Bureau, New York, 1961).

Ferguson, E. E., F. C. Fehsenfeld, and D. L. Albritton, in *Gas Phase Ion Chemistry, Vol. 1*, edited by M. T. Bowers (Academic Press, New York, 1979).

Ferguson, E. E., F. C. Fehsenfeld, and A. L. Schmeltekopf, *Adv. At. Mol. Phys.* **5**, 1 (1969).

Fhadil, H. A., A. T. Numan, T. Shuttleworth, and J. B. Hasted, *Int. J. Mass Spectrom. Ion Processes* **65**, 307 (1985).

Follmeg, B., Ph. D. Thesis, Johann Wolfgang Goethe University, Frankfurt am Main, Germany (1990).

Follmeg, B., P. Rosmus, and H.-J. Werner, *J. Chem. Phys.* **93**, 4687 (1990).

Follmeg, B., H.-J. Werner, and P. Rosmus, *J. Chem. Phys.* **95**, 979 (1991).

Fowles, G. R., *Introduction to Modern Optics*, 2nd ed. (Dover, New York, 1975).

Friedrich, B., D. P. Pullman, and D. R. Herschbach, *J. Phys. Chem.* **95**, 8118 (1991).

- Frost, M. J., S. Kato, V. M. Bierbaum, and S. R. Leone, *J. Chem. Phys.* **98**, 5993 (1993).
- Fukuchi, T., A. Y. Wong, and R. F. Wuerker, *J. Appl. Phys.* **77**, 4899 (1995).
- Fukuchi, T., R. F. Wuerker, and A. Y. Wong, *J. Appl. Phys.* **75**, 4906 (1994).
- Gao, Y., P. S. Gorgone, S. Davis, E. K. McCall, and B. Stewart, *J. Chem. Phys.* **104**, 1415 (1996).
- Gao, Y., and B. Stewart, *J. Chem. Phys.* **103**, 860 (1995).
- Golden, S., *Elements of the Theory of Gases* (Addison-Wesley Publishing Co., Reading MA, 1964).
- Greene, C. H., and R. N. Zare, *J. Chem. Phys.* **78**, 6741 (1983).
- Greene, C. H., and R. N. Zare, *Annu. Rev. Phys. Chem.* **33**, 119 (1982).
- Griffiths, D. J., *Introduction to Electrodynamics* (Prentice-Hall, Englewood Cliffs NJ, 1981).
- Guest, J. A., M. A. O'Halloran, and R. N. Zare, *Chem. Phys. Lett.* **103**, 261 (1984).
- Haese, N. N., F.-S. Pan, and T. Oka, *Phys. Rev. Lett.* **50**, 1575 (1983).
- Hall, J. L., and S. A. Lee, in *Tunable Lasers and Applications*, edited by A. Morradian, T. Jaeger, and P. Stokseth (Springer, New York, 1976).
- Hamilton, C. E., Ph. D. Thesis, University of Colorado (1985).
- Hamilton, T. D. S., I. H. Munro, and G. Walker, in *Luminescence Spectroscopy*, edited by M. D. Lumb (Academic Press, New York, 1978).
- Harich, S., and A. M. Wodtke, *J. Chem. Phys.* **107**, 5983 (1997).
- Herzberg, G., *Molecular Spectra and Molecular Structure, Vol I: Spectra of Diatomic Molecules* (D. Van Nostrand, New York, 1950).
- Hilborn, R. C., *Am. J. Phys.* **50**, 982 (1982).
- Hill, D. N., S. Fornaca, and M. G. Wickham, *Rev. Sci. Instrum.* **54**, 309 (1983).

Hirst, D. M., *Potential Energy Surfaces: Molecular Structure and Reaction Dynamics* (Taylor & Francis, Philadelphia, 1985).

Hollberg, L., in *Dye Laser Principles with Applications*, edited by F. J. Duarte and L. W. Hillman (Academic Press, Boston, 1990), Chap. 5.

Hong, X., and T. A. Miller, *J. Chem. Phys.* **101**, 4572 (1994).

Hou, H., S. J. Gulding, C. T. Rettner, A. M. Wodtke, and D. J. Auerbach, *Science* **277**, 80 (1997).

Hougen, J. T., *The Calculation of Rotational Energy Levels and Rotational Line Intensities in Diatomic Molecules*, N. B. S. Monograph 115 (U.S. Government Printing Office, Washington D.C., June 1970).

Huber, K. P., and G. Herzberg, *Molecular Spectra and Molecular Structure, Vol IV: Constants of Diatomic Molecules* (Van Nostrand Reinhold, New York, 1979).

Ikezoe, Y., S. Matsuoka, M. Takebe, and A. Viggiano, *Gas Phase Ion-Molecule Reaction Rate Constants Through 1986* (published by the Ion Reaction Research Group of the Mass Spectroscopy Society of Japan; distributed by the Maruzen Co. Ltd, Tokyo, Japan, 1987).

Jarrold, M. F., *J. Phys. Chem.* **99**, 11 (1995).

Johnsen, R., H. L. Brown, and M. A. Biondi, *J. Chem. Phys.* **52**, 5080 (1970).

Johnson, R. E., *Introduction to Atomic and Molecular Collisions* (Plenum Press, New York, 1982).

Johnston, T. F., R. H. Brady, and W. Proffitt, *Appl. Opt.* **21**, 2307 (1982).

Johnston, T. F. Jr., article "Tunable Dye Lasers" in *Encyclopedia of Physical Science and Technology*, Vol. 14 (Academic Press, Orlando FL, 1987), p. 96.

Johnston, T., *Opt. Commun.* **69**, 147 (1988).

Kaneko, Y., *Comments At. Mol. Phys.* **10**, 145 (1981).

Kinsey, J. L., *J. Chem. Phys.* **66**, 2560 (1977).

Knutsen, K., V. M. Bierbaum, and S. R. Leone, *Planet. Space Sci.* **36**, 307 (1988).

Kogelnik, H., and T. Li, *Appl. Opt.* **5**, 1550 (1966).

- Kolts, J. H., and D. W. Setser, in *Reactive Intermediates in the Gas Phase*, edited by D. W. Setser (Academic Press, New York, 1979).
- Kondo, Y., and J. L. Moruzzi, *Int. J. Mass. Spec. Ion Phys.* **38**, 1 (1981).
- Koutselos, A. D., and E. A. Mason, *Chem. Phys.* **153**, 351 (1991).
- Kumar, G. R., P. Gross, C. P. Safvan, F. A. Rajgara, and D. Mathur, *Phys. Rev. A* **53**, 3098 (1996).
- Kumar, S., and P. K. Ghosh, *Int. J. Mass Spectrom. Ion Processes* **127**, 105 (1993).
- Kummel, A. C., G. O. Sitz, and R. N. Zare, *J. Chem. Phys.* **88**, 7357 (1988).
- Kuo, C.-H., I. W. Milkman, T. C. Steimle, and J. T. Moseley, *J. Chem. Phys.* **85**, 4269 (1986).
- Lancaster, D., *TTL Cookbook* (Howard W. Sams & Co., Indianapolis IN, 1982).
- Lauenstein, C. P., M. J. Bastian, V. M. Bierbaum, S. M. Penn, and S. R. Leone, *J. Chem. Phys.* **94**, 7810 (1991).
- Lefebvre-Brion, H., and R. W. Field, *Perturbations in the Spectra of Diatomic Molecules* (Academic Press, New York, 1986).
- Leone, S. R., in *Bimolecular Collisions*, edited by M. N. R. Ashfold and J. E. Baggott (Royal Society of Chemistry, Letchworth, England, 1989).
- Levine, R. D., and R. B. Bernstein, *Molecular Reaction Dynamics and Chemical Reactivity* (Oxford University Press, New York, 1987).
- Lin, S. L., and J. N. Bardsley, *J. Chem. Phys.* **66**, 435 (1977).
- Lindinger, W., and D. L. Albritton, *J. Chem. Phys.* **62**, 3517 (1975).
- Liu, W.-K., and A. S. Dickinson, *Mol. Phys.* **88**, 161 (1996).
- Loesch, H. J., and J. Moller, *J. Phys. Chem. A* **101**, 7534 (1997).
- Lofthus, A., and P. H. Krupenie, *J. Phys. Chem. Ref. Data* **6**, 113 (1977).
- Lovaas, T. H., H. R. Skullerud, O.-H. Kristensen, and D. Linhjell, *J. Phys. D* **20**, 1465 (1987).
- Mackenzie, S. R., and T. P. Softley, *J. Chem. Phys.* **101**, 10609 (1994).

Makabe, T., K. Misawa, and T. Mori, *J. Phys. D* **14**, 199 (1981).

Malmstadt, H. V., C. G. Enke, and S. R. Crouch, *Electronics and Instrumentation for Scientists* (The Benjamin/Cummings Publishing Co., Reading MA, 1981).

Mansour, N. B., T. P. Dinneen, and L. Young, *Nucl. Instrum. Methods Phys. Res. B* **40/41**, 252 (1989).

Mansour, N. B., C. Kurtz, T. C. Steimle, G. L. Goodman, L. Young, T. J. Scholl, S. D. Rosner, and R. A. Holt, *Phys. Rev. A* **44**, 4418 (1991).

Marion, J. B., and S. T. Thornton, *Classical Dynamics of Particles & Systems*, 3rd ed. (Harcourt Brace Jovanovich, New York, 1988).

Mason, E. A., and E. W. McDaniel, *Transport Properties of Ions in Gases* (John Wiley & Sons, New York, 1988).

Mattheus, A., A. Fischer, G. Ziegler, E. Gottwald, and K. Bergmann, *Phys. Rev. Lett.* **56**, 712 (1986).

McCaffery, A. J., and R. J. Wilson, *Phys. Rev. Lett.* **77**, 48 (1996).

McDaniel, E. W., *Collision Phenomena in Ionized Gases* (John Wiley & Sons, New York, 1964).

McDaniel, E. W., and E. A. Mason, *The Mobility and Diffusion of Ions in Gases* (John Wiley & Sons, New York, 1973).

McFarland, M., D. L. Albritton, F. C. Fehsenfeld, E. E. Ferguson, and A. L. Schmeltekopf, *J. Chem. Phys.* **59**, 6610 (1973).

McFarland, M., D. L. Albritton, F. C. Fehsenfeld, E. E. Ferguson, and A. L. Schmeltekopf, *J. Chem. Phys.* **59**, 6620 (1973).

Meyer, H., and S. R. Leone, *Mol. Phys.* **63**, 705 (1988).

Miller, S., J. Tennyson, B. Follmeg, P. Rosmus, and H.-J. Werner, *J. Chem. Phys.* **89**, 2178 (1988).

Miller, T. A., T. Suzuki, and E. Hirota, *J. Chem. Phys.* **80**, 4671 (1984).

Monchick, L., *J. Chem. Phys.* **75**, 3377 (1981).

Moore, J. H., C. C. Davis, and M. A. Coplan, *Building Scientific Apparatus: A Practical Guide to Design and Construction*, Second Edition (Addison-Wesley Publishing Co., Reading MA, 1989).

Ong, P. P., M. J. Hogan, K. Y. Lam, and L. A. Viehland, *Phys. Rev. A* **45**, 3997 (1992).

Orr-Ewing, A. J., and R. N. Zare, *Annu. Rev. Phys. Chem.* **45**, 315 (1994).

Penn, S. M., J. P. M. Beijers, R. A. Dressler, V. M. Bierbaum, and S. R. Leone, *J. Chem. Phys.* **93**, 5118 (1990).

Phelps, A. V., *J. Res. Natl. Inst. Stand. Technol.* **95**, 407 (1990).

Press, W. H., B. P. Flannery, S. A. Teukolsky, and W. T. Vetterling, *Numerical Recipes in C: The Art of Scientific Computing* (Cambridge University Press, Cambridge, 1988).

Pullman, D. P., B. Friedrich, and D. R. Herschbach, *J. Chem. Phys.* **93**, 3224 (1990).

Pullman, D., B. Friedrich, and D. Herschbach, *J. Phys. Chem.* **99**, 7407 (1995).

Reif, F., *Fundamentals of Statistical and Thermal Physics* (McGraw-Hill, New York, 1965).

Rosner, S. D., T. D. Gaily, and R. A. Holt, *Phys. Rev. A* **26**, 697 (1982).

Rosner, S. D., T. D. Gaily, and R. A. Holt, *J. Mol. Spectrosc.* **109**, 73 (1985).

Rowe, M. D., and A. J. McCaffery, *Chem. Phys.* **43**, 35 (1979).

Sanders, W. R., and J. B. Anderson, *Chem. Phys. Lett.* **47**, 283 (1977).

Sanders, W. R., and J. B. Anderson, *J. Phys. Chem.* **88**, 4479 (1984).

Sanderson, J., H. Tanuma, N. Kobayashi, and Y. Kaneko, *J. Phys. B* **26**, L465 (1993).

Savitzky, A., and M. J. E. Golay, *Anal. Chem.* **36**, 1627 (1964).

Schmeltekopf, A. L., and F. C. Fehsenfeld, *J. Chem. Phys.* **53**, 3173 (1970).

Schmeltekopf, A. L., E. E. Ferguson, and F. C. Fehsenfeld, *J. Chem. Phys.* **48**, 2966 (1968).

- Scholl, T. J., A. W. Taylor, R. A. Holt, and S. D. Rosner, *J. Mol. Spectrosc.* **152**, 398 (1992).
- Schultz, R. H., and P. B. Armentrout, *Chem. Phys. Lett.* **179**, 429 (1991).
- Scott, T. P., N. Smith, and D. E. Pritchard, *J. Chem. Phys.* **80**, 4841 (1984).
- Shurcliff, W. A., *Polarized Light: Production and Use* (Harvard University Press, Cambridge MA, 1962).
- Siegman, A. E., *Lasers* (University Science Books, Mill Valley, CA, 1986).
- Sinha, M. P., C. D. Caldwell, and R. N. Zare, *J. Chem. Phys.* **61**, 491 (1974).
- Sitz, G. O., and R. L. Farrow, *J. Chem. Phys.* **101**, 4682 (1994).
- Smith, D., and N. G. Adams, in *Gas Phase Ion Chemistry, Vol. 1*, edited by M. T. Bowers (Academic Press, New York, 1979).
- Smith, M. A., Ph. D. Thesis, University of Colorado (1982).
- Smith, N., T. A. Brunner, R. D. Driver, and D. E. Pritchard, *J. Chem. Phys.* **69**, 1498 (1978).
- Smith, N., T. A. Brunner, A. W. Karp, and D. E. Pritchard, *Phys. Rev. Lett.* **43**, 693 (1979).
- Smith, N., T. A. Brunner, and D. E. Pritchard, *J. Chem. Phys.* **74**, 467 (1981).
- Steinfeld, J. I., *Molecules and Radiation: An Introduction to Modern Molecular Spectroscopy*, 2nd ed. (MIT Press, Cambridge MA, 1985).
- Steinfeld, J. I., J. S. Francisco, and W. L. Hase, *Chemical Kinetics and Dynamics* (Prentice-Hall, Englewood Cliffs NJ, 1989).
- Taatjes, C. A., J. I. Cline, and S. R. Leone, *J. Chem. Phys.* **93**, 6554 (1990).
- Taylor, J. R., *An Introduction to Error Analysis* (University Science Books, Mill Valley CA, 1982).
- Townes, C. H., and A. L. Schawlow, *Microwave Spectroscopy* (McGraw-Hill, New York, 1955).
- Tully, F. P., and J. L. Durant, Jr., *Appl. Opt.* **27**, 2096 (1988).

- Vaughan, J. M., *The Fabry-Perot Interferometer: History, Theory, Practice and Applications* (Adam Hilger, Philadelphia PA, 1989).
- Viehland, L. A., Chem. Phys. **101**, 1 (1986).
- Viehland, L. A., A. S. Dickinson, and R. G. A. R. MacIagan, Chem. Phys. **211**, 1 (1996).
- Viehland, L. A., S. L. Lin, and E. A. Mason, Chem. Phys. **54**, 341 (1981).
- Viehland, L. A., and E. A. Mason, Atom. Data Nuc. Data Tables **60**, 37 (1995).
- Viehland, L. A., E. A. Mason, W. F. Morrison, and M. R. Flannery, Atom. Data Nuc. Data Tables **16**, 495 (1975).
- Viggiano, A. A, R. A. Morris, and E. A. Mason, J. Chem. Phys. **98**, 6483 (1993).
- Visser, A. G., J. P. Bekoooy, L. K. Van Der Meij, C. De Vreugd, and J. Korving, Chem. Phys. **20**, 391 (1977).
- von Helden, G., N. G. Gotts, and M. T. Bowers, Nature (London) **363**, 60 (1993).
- Wannier, G. H., Bell Syst. Tech. J. **32**, 170 (1953).
- Weida, M. J., and D. J. Nesbitt, J. Chem. Phys. **100**, 6372 (1994).
- Whealton, J. H., Comments At. Mol. Phys. **7**, 35 (1977).
- Whealton, J. H., and S.-B. Woo, Phys. Rev. A **6**, 2319 (1972).
- Williams, R. M., Ph. D. Thesis, University of Colorado (1997).
- Wolfram, S., *Mathematica: A System for Doing Mathematics by Computer*, 2nd ed. (Addison-Wesley, New York, 1991).
- Young, H. D., *Statistical Treatment of Experimental Data* (McGraw-Hill, New York, 1962).
- Zare, R. N., *Angular Momentum: Understanding Spatial Aspects in Chemistry and Physics* (Wiley-Interscience, New York, 1988).
- Zwier, T. S., Ph. D. Thesis, University of Colorado (1981).