

Bibliography

Editions listed are (for the most part) those consulted in the preparation of this book. Where later editions or reprints are known they are noted after the entry. No claim to bibliographic completeness is made. If a given work is listed in the Suggested References section of a chapter, this fact is indicated by the appropriate chapter number in parenthesis after the reference.

General Treatises on Classical Mechanics

AHARONI, J., *Lectures on mechanics*. Oxford: Oxford University Press, 1972. (Chapter 5)

AMES, JOSEPH SWEETMAN, AND FRANCIS D. MURNHAGHAN, *Theoretical mechanics*. Boston: Ginn and Company, 1929. New York: Dover, 1958.

APPEL, PAUL, *Traité de mécanique rationnelle, Tome 2: Dynamique des systèmes. Mécanique analytique*, 6th ed. Paris: Gauthier-Villars, 1953.

BARGER, VERNON D., AND MARTIN G. OLSSON, *Classical mechanics, a modern perspective*. New York: McGraw-Hill, 1973. (Chapter 5)

BARTLETT, JAMES H., *Classical and modern mechanics*. University, Alabama: University of Alabama Press, 1975.

BRADBURY, T. C., *Theoretical mechanics*. New York: Wiley, 1968. (Chapter 4)

CORBEN, H. C., AND PHILIP STEHLE, *Classical mechanics*, 2nd ed. New York: Wiley, 1960. New York: R. E. Krieger, 1974. (Chapter 6)

FINKELSTEIN, ROBERT J., *Nonrelativistic mechanics*. Reading, Mass.: W. A. Benjamin, 1973.

FOWLES, GRANT R., *Analytical mechanics*. New York: Holt, Rinehart and Winston, 1962.

GANTMACHER, F., *Lectures in analytical mechanics*. Translated from Russian. Moscow: Mir Publishers, 1970. Reprint, 1975.

GREENWOOD, DONALD T., *Principles of dynamics*. Englewood Cliffs, N.J.: Prentice-Hall, 1965.

———. *Classical dynamics*. Englewood Cliffs, N.J.: Prentice-Hall, 1977.

GROESBERG, SANFORD WALTON, *Advanced mechanics*. New York: Wiley, 1968. (Chapter 5)

HAMEL, GEORG, *Theoretische Mechanik, eine einheitliche einföhrung in die gesamte Mechanik*. Berlin: Springer-Verlag, 1949. Corrected reprint, 1967. (Chapter 4)

HAUSER, WALTER, *Introduction to the principles of mechanics*. Reading, Mass.: Addison-Wesley, 1965. (Chapter 1)

KANE, THOMAS R., *Dynamics*. New York: Holt, Rinehart and Winston, 1968.

KILMISTER, C. W., *Hamiltonian dynamics*. New York: Wiley, 1964. (Chapter 9)

———. *Lagrangian dynamics*. New York: Plenum Press, 1967.

KILMISTER, C. W., AND J. E. REEVE, *Rational mechanics*. New York: American Elsevier, 1966. (Chapter 1)

KONOPINSKI, EMIL JAN, *Classical descriptions of motion*. San Francisco: Freeman, 1969.

LANCZOS, CORNELIUS, *The variational principles of mechanics*, 4th ed. Toronto: University of Toronto Press, 1970. (Chapters 1, 2, 8, 9, 10)

LANDAU, L. D., AND E. M. LIFSHITZ, *Mechanics*, 3rd ed. *Course of Theoretical Physics*, vol. 1. Translated from Russian. Oxford: Pergamon Press, 1976. (Chapters 1, 3, 6)

MACMILLAN, WILLIAM DUNCAN, *Theoretical mechanics*.

Vol. 1: *Statics and the dynamics of a particle*. New York: McGraw-Hill, 1927. (Chapter 3)

Vol. 3: *Dynamics of rigid bodies*. New York: McGraw-Hill, 1936. New York: Dover, 1960. (Chapter 5)

MARION, JERRY B., *Classical dynamics of particles and systems*, 2nd ed. New York: Academic Press, 1970. (Chapter 3)

MEIROVITCH, LEONARD, *Methods of analytical dynamics*. New York: McGraw-Hill, 1970. (Chapters 5, 6)

MILNE, E. A., *Vectorial mechanics*. New York: Interscience Publishers, 1948.

MORGENSTERN, D., AND I. SZABO, *Vorlesungen über theoretische Mechanik*. Berlin: Springer-Verlag, 1961.

OSGOOD, WILLIAM F., *Mechanics*. New York: Macmillan, 1937. (Chapter 1)

PARS, L. A., *A treatise on analytical dynamics*. London: Heinemann, 1965.

SALETAN, EUGENE J., AND ALAN H. CROMER, *Theoretical mechanics*. New York: Wiley, 1971. (Chapters 4, 9, 11, 12)

SLATER, JOHN C., AND NATHANIEL H. FRANK, *Mechanics*. New York: McGraw-Hill, 1947. (Chapter 12)

SOMMERFELD, ARNOLD, *Mechanics. Lectures on theoretical physics*, vol. 1. New York: Academic Press, 1952. (Chapter 5)

SPOSITO, GARRISON, *An introduction to classical dynamics*. New York: Wiley, 1976.

SUDARSHAN, E. C. G., AND N. MUKUNDA, *Classical dynamics: A modern perspective*. New York: Wiley, 1974. (Chapter 9)

SYMON, KEITH R., *Mechanics*, 3rd ed. Reading, Mass.: Addison-Wesley, 1971. (Chapters 1, 5, 7, 8)

SYNGE, JOHN L., *Classical dynamics*, in vol. 3, part 1 of *Encyclopedia of physics*. Berlin: Springer-Verlag, 1960. (Chapters 8, 9)

SYNGE, JOHN L., AND BYRON A. GRIFFITH, *Principles of mechanics*, 3rd ed. New York: McGraw-Hill, 1959.

TER HARR, D., *Elements of Hamiltonian mechanics*. Amsterdam: North-Holland, 1961. Second ed., Oxford: Pergamon Press, 1971. (Chapters 6, 8, 10)

THIRRING, WALTER, *A course in mathematical physics I: Classical dynamical systems*. Translated from German. New York: Springer-Verlag, 1978.

THOMSON, WILLIAM (LORD KELVIN), AND PETER GUTHRIE TAIT, *Treatise on natural philosophy*. Cambridge: Cambridge University Press, 1879. Slightly revised, 1896. Reprinted as *Principles of mechanics and dynamics*, New York: Dover, 1962.

WEBSTER, ARTHUR GORDON, *The dynamics of particles and of rigid, elastic, and fluid bodies*. Leipzig: B. G. Teubner, 1904. New York: Stechert-Hafner, 1920.

WELLS, DALE A., *Theory and problems of Lagrangian dynamics*. New York: McGraw-Hill (Schaum), 1967. (Chapters 2, 8)

WHITTAKER, E. T., *A treatise on the analytical dynamics of particles and rigid bodies*, 4th ed. Cambridge: Cambridge University Press, 1937. (Chapters 1, 2, 3, 4, 6, 8)

ZAJAC, ALFRED, *Basic principles and laws of mechanics*. Boston: D. C. Heath, 1966.

———. *Principles of classical mechanics and field theory*, in vol. 3, part 1 of *Encyclopedia of physics*. Berlin: Springer-Verlag, 1960. (Chapters 1, 8) (See also J. L. Synge; and C. Truesdell and R. A. Toupin.)

Works on Special Aspects of Classical Mechanics

ABRAHAM, RALPH, AND JERROLD E. MARSDEN, *Foundations of mechanics*, 2nd ed. Reading, Mass.: Benjamin/Cummings, 1978. (Chapter 11)

ANDERSON, JAMES L., *Principles of relativity physics*. New York: Academic Press, 1967.

ARNOLD, V. I., *Mathematical methods of classical mechanics*. Translated from the Russian edition of 1974. New York: Springer-Verlag, 1978.

ARNOLD, V. I., AND A. AVEZ, *Ergodic problems of classical mechanics*. New York: W. A. Benjamin, 1968.

BERGMANN, PETER GABRIEL, *Introduction to the theory of relativity*. New York: Prentice-Hall, 1942.

BORN, MAX, *The mechanics of the atom*. Translated by J. W. Fisher. London: G. Bell and Sons, 1927. Reprint, New York: Ungar, 1967. (Chapters 9, 10, 11)

BROWN, ERNEST W., *An introductory treatise on the lunar theory*. Cambridge: Cambridge University Press, 1896. Reprint, New York: Dover, 1960.

BROUWER, DIRK, AND GERALD M. CLEMENCE, *Methods of celestial mechanics*. New York: Academic Press, 1961.

BRUNET, PIERRE, *Etude historique sur le principe de la moindre action*. Paris: Herrmann et Cie, 1938. (Chapter 8)

BYLERLY, WILLIAM ELWOOD, *An introduction to the use of generalized coordinates in mechanics and physics*. Boston: Ginn, 1913. New York: Dover, 1965.

CHEN, YU, *Vibrations: Theoretical methods*. Reading, Mass.: Addison-Wesley, 1966. (Chapter 6)

CRANDALL, STEPHEN H., et al., *Dynamics of mechanical and electromechanical systems*. New York: McGraw-Hill, 1968.

DANBY, J. M. A., *Fundamentals of celestial mechanics*. New York: Macmillan, 1962. (Chapters 3, 11)

DEUTSCH, RALPH, *Orbital dynamics of space vehicles*. Englewood Cliffs, N.J., Prentice-Hall, 1963. (Chapter 11)

DZIOBEK, OTTO, *Mathematical theories of planetary motions*. Register Publishing Co., 1892. Reprint, New York: Dover, 1962.

EINSTEIN, ALBERT, *The meaning of relativity*, 5th ed. Princeton: Princeton University Press, 1956. (Chapter 7)

FINLAY-FREUNDLICH, E., *Celestial mechanics*. New York: Pergamon Press, 1958.

FOCK, V., *The theory of space, time and gravitation*, 2nd English ed. New York: Pergamon (Macmillan), 1964. (Chapter 7)

FRENCH, A. P., *Special relativity*. (The M.I.T. Introductory Physics Series.) New York: W. W. Norton, 1968. (Chapter 7)

GARFINKEL, BORIS, *The Lagrange-Hamilton-Jacobi mechanics*, in *Space mathematics, Part 1*, J. Barkley Rosser, ed., *Lectures in applied mathematics*, vol. 5. Providence, R.I.: American Mathematical Society, 1966. (Chapters 10, 11)

GEYLING, FRANZ T., AND H. ROBERT WESTERMAN, *Introduction to orbital mechanics*. Reading, Mass.: Addison-Wesley, 1971.

GIACAGLIA, G. E. O., *Perturbation methods in non-linear systems*. New York: Springer-Verlag, 1972. (Chapter 11)

GOSSICK, B. R., *Hamilton's principle and physical systems*. New York: Academic Press, 1967. (Chapter 2)

GRAY, ANDREW, *A treatise on gyrostatics and rotational motion*. London: Macmillan, 1918. New York: Dover, 1959. (Chapter 5)

GRAMMEL, R., *Der Kreisel*. Berlin: Springer-Verlag, 1950.

HAGEDORN, R., *Relativistic kinematics*. New York: W. A. Benjamin, 1963. Reprint, 1973. (Chapter 7)

HAGIHARA, YUSUKE, *Celestial mechanics*, vol. 2, parts 1 & 2, *Perturbation theory*. Cambridge, Mass.: M.I.T. Press, 1972. (Chapter 11)

KERNER, EDWARD H., ed., *The theory of action-at-a-distance in relativistic particle dynamics*. A reprint collection. New York: Gordon and Breach, 1972.

KLEIN, FELIX, *The mathematical theory of the top*. New York: Scribners, 1897. Reprinted in *Congruence of sets and other monographs*, Bronx, N.Y.: Chelsea, 1967.

KLEIN, FELIX, AND ARNOLD SOMMERFELD, *Über die Theorie des Kreisels* (4 vols). Leipzig: B. G. Teubner, 1897-1910. Reprint, New York: Johnson, 1965. (Chapter 5)

KOTKIN, G. L., AND V. G. SERBO, *Collection of problems in classical mechanics*. Translated from Russian. Oxford: Pergamon Press, 1971.

KURTH, RUDOLF, *Introduction to the mechanics of the solar system*. New York: Pergamon Press, 1969.

LEHNERT, BO, *Dynamics of charged particles*. Amsterdam: North-Holland, 1964. (Chapter 11)

LEIMANIS, EUGENE, *The general problem of motion of coupled rigid bodies about a fixed point*. New York: Springer-Verlag, 1965. (Chapter 5)

MACH, ERNST, *The science of mechanics*, 5th English ed. LaSalle, Ill.: Open Court, 1942. (Chapter 1)

MAGNUS, KURT, *Kreisel Theorie und Anwendungen*. Berlin: Springer-Verlag, 1971.

MANN, RONALD A., *The classical dynamics of particles: Galilean and Lorentz Relativity*. New York: Academic Press, 1974. (Chapter 7)

MCCUSKEY, S. W., *Introduction to celestial mechanics*. Reading, Mass.: Addison-Wesley, 1963. (Chapter 3)

MERCIER, ANDRÉ, *Analytical and canonical formalism in physics*. Amsterdam: North-Holland, 1959.

MISNER, CHARLES W.; KIP S. THORNE; JOHN ARCHIBALD WHEELER, *Gravitation*. San Francisco: Freeman, 1973. (Chapter 7)

MOLLER, C., *The theory of relativity*, 2nd ed. Oxford: Oxford University Press, 1972.

MOSER, JURGEN, *Stable and random motions in dynamical systems, with special emphasis on celestial mechanics*. Princeton: Princeton University Press, 1973. (Chapter 11)

MOULTON, FOREST RAY, *An introduction to celestial mechanics*, 2nd ed. New York: Macmillan, 1914.

NORTHROP, THEODORE G., *The adiabatic motion of charged particles*. New York: Interscience, 1963. (Chapter 11)

OLSON, HARRY F., *Solution of engineering problems by dynamical analogies*, 2nd ed. Princeton, N.J.: D. Van Nostrand, 1966 (corrected reprint of *Dynamical analogies*, 2nd ed., 1958). (Chapter 2)

PLUMMER, H. C., *An introductory treatise on dynamical astronomy*. Cambridge: Cambridge University Press, 1918. Reprint, New York: Dover, 1960. (Chapter 3)

POINCARÉ, HENRI, *Les méthodes nouvelles de la mécanique céleste* (3 vols.). Paris: Gauthier-Villars, 1892-99. Reprint, New York: Dover, 1957.

ROUTH, EDWARD JOHN, *Dynamics of a system of rigid bodies*. Part I, *Elementary Part*, 5th ed. London: Macmillan, 1891. Part II, *Advanced Part*, 5th ed. London: Macmillan, 1892. (Chapter 5)

SANTILLI, RUGGERO MARIO, *Foundations of theoretical mechanics I*. New York: Springer-Verlag, 1978.

SARD, R. D., *Relativistic mechanics: Special relativity and classical particle dynamics*. New York: W. A. Benjamin, 1970. (Chapter 7)

SCHWARTZ, HERMAN M., *Introduction to special relativity*. New York: McGraw-Hill, 1968. (Chapter 7)

SEIGEL, CARL LUDVIG, AND J. K. MOSER, *Lectures on celestial mechanics*. Translated from German. New York: Springer-Verlag, 1971.

SMART, W. M., *Celestial mechanics*. New York: Wiley, 1953. Reprint, 1961.

SOPER, DAVIDSON EUGENE, *Classical field theory*. New York: Wiley, 1976.

STERNBERG, SHLOMO, *Celestial mechanics*. New York: W. A. Benjamin, 1969.

STERNE, THEODORE E., *An introduction to celestial mechanics*. New York: Interscience, 1960.

TISSERAND, F., *Traité de mécanique céleste, Tome I, Perturbation des planètes...* Paris: Gauthier-Villars, 1889. New printing, 1960.

TRUESDELL, C., *Essays in the history of mechanics*. New York: Springer-Verlag, 1968. (Chapter 1)

TRUESDELL, C., AND R. A. TOUPIN, *The classical field theories*, in vol. 3, part 1 of *Encyclopedia of Physics*. Berlin: Springer-Verlag, 1960. (Chapter 1)

WINTNER, AUREL, *The analytical foundations of celestial mechanics*. Princeton: Princeton University Press, 1941.

WRIGLEY, WALTER; WALTER M. HOLLISTER; AND WILLIAM G. DENHARD, *Gyroscopic theory, design and instrumentation*. Cambridge, Mass.: M.I.T. Press, 1969. (Chapter 5)

YOURGRAU, WOLFGANG, AND STANLEY MANDELSTAM, *Variational principles in dynamics and quantum theory*, 3rd ed. Philadelphia: Saunders, 1968.

Works in Other Branches of Physics and Mathematics, Containing Material of Interest for Classical Mechanics

ARFKEN, GEORGE, *Mathematical methods for physicists*. New York: Academic Press, 1966. Second ed., 1970. (Chapter 4)

BADGER, PARKER H., *Equilibrium thermodynamics*. Boston: Allyn and Bacon, 1967. (Chapter 8)

BARUT, A. O., *Electrodynamics and classical theory of fields and particles*. New York: Macmillan, 1964. (Chapters 7, 12)

BLISS, GILBERT AMES, *Calculus of variations*. Carus Mathematical Monographs, 1. LaSalle, Ill.: Open Court, 1925. (Chapter 2)

BOCHER, MAXIME, *Introduction to higher algebra*. New York: Macmillan, 1907.

BORN, MAX, AND PASCUAL JORDAN, *Elementare Quantenmechanik*. Berlin: Julius Springer, 1930. Ann Arbor: J. W. Edwards, 1946.

BORN, MAX, AND EMIL WOLF, *Principles of optics*. London: Pergamon Press, 1959. Fifth ed., Oxford: Pergamon Press, 1975. (Chapter 10)

BRAND, LOUIS, *Vector and tensor analysis*. New York: Wiley, 1947. (Chapter 5)

BRILLOUIN, LEON, *Tensors in mechanics and elasticity*. Translated from the 1938 French edition. New York: Academic Press, 1964. (Chapter 10)

BORISENKO, A. I., AND I. E. TARAPOV, *Vector and tensor analysis with applications*. Translated and revised by R. A. Silverman. Englewood Cliffs, N.J.: Prentice-Hall, 1968. (Chapter 4)

CARATHÉODORY, C., *Calculus of variations and partial differential equations*. San Francisco: Holden-Day, vol. 1, 1965; vol. 2, 1967. Translated from German edition, 1935; revised, 1956. (Chapters 9, 10)

CASIMIR, H. B. G., *Rotation of a rigid body in quantum mechanics*. Groningen: J. B. Wolters, 1931.

CONDON, E. U., AND G. H. SHORTLEY, *The theory of atomic spectra*. Cambridge: Cambridge University Press, 1935.

COURANT, R., AND D. HILBERT, *Methods of mathematical physics*, 2 vols. New York: Interscience, vol. 1, 1953; vol. 2, 1962. (Chapters 2, 8, 10)

CRONIN, JEREMIAH A.; DAVID F. GREENBERG; AND VALENTINE L. TELEGDI, *University of Chicago graduate problems in physics, with solutions*. Chicago: University of Chicago Press, 1977.

DAVYDOV, A. S., *Quantum mechanics*. Oxford: Pergamon Press, 1965. Second ed., 1976.

DIRAC, PAUL A. M., *Lectures on quantum mechanics*. New York: Yeshiva University, 1964.

EISELE, JOHN A., AND ROBERT M. MASON, *Applied matrix and tensor analysis*. New York: Wiley-Interscience, 1970.

EISENHART, LUTHER PFAHLER, *Continuous groups of transformation*. Princeton: Princeton University Press, 1933. Reprint, New York: Dover, 1961.

ELSGOLC, L. E., *Calculus of variations*. Translated from Russian. Reading, Mass.: Addison-Wesley, 1962.

GARDNER, MARTIN, *New mathematical diversions from Scientific American*. New York: Simon & Schuster, 1971.

GELFAND, I. M., AND S. V. FOMIN, *Calculus of variations*. Translated and edited by Richard A. Silverman. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

GIBBS, J. WILLARD, *Vector analysis*. Edited by E. B. Wilson. New York: Scribner, 1901. New Haven: Yale University Press, 1931.

GOERTZEL, GERALD, AND NUNZIO TRALLI, *Some mathematical methods of physics*. New York: McGraw-Hill, 1960.

GUILLEMIN, ERNST A., *The mathematics of circuit analysis*. New York: Wiley, 1949. (Chapter 6)

HERZBERG, GERHARD, *Infrared and Raman spectra of polyatomic molecules*. New York: D. Van Nostrand, 1945. (Chapters 4, 6)

HESS, SEYMOUR L., *Introduction to theoretical meteorology*. New York: Holt, Rinehart and Winston, 1959. (Chapter 4)

HILDEBRAND, FRANCIS B., *Methods of applied mathematics*, 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1965.

HIRSCHFELDER, JOSEPH O.; CHARLES F. CURTISS; AND R. BYRON BIRD, *Molecular theory of gases and liquids*. New York: Wiley, 1954. Slightly revised edition, 1964. (Chapter 3)

JACKSON, JOHN DAVID, *Classical electrodynamics*. New York: Wiley, 1962. Second ed., 1975.

JEFFREYS, H., AND BERTHA S. JEFFREYS, *Methods of mathematical physics*, 2nd ed. Cambridge: Cambridge University Press, 1950. Third ed., 1972. (Chapters 4, 6)

KAPLAN, WILFRED, *Advanced calculus*, 2nd ed. Reading, Mass.: Addison-Wesley, 1973.

LANDAU, L. D., AND E. M. LIFSHITZ, *Quantum mechanics, non-relativistic theory*, 2nd ed., in vol. 3 of *Course of theoretical physics*. Oxford: Pergamon Press, 1965. Third ed., 1977.

LANG, SERGE, *A second course in calculus*, 3rd ed. Reading, Mass.: Addison-Wesley, 1973.

LINDSAY, ROBERT BRUCE, AND HENRY MARGENAU, *Foundations of physics*. New York: Wiley, 1936. (Chapters 1, 8)

LIPSCHUTZ, SEYMOUR, *Theory and problems of linear algebra*. Schaum's Outline Series. New York: McGraw-Hill, 1968.

LOEBL, ERNEST M., ed., *Group theory and its applications*, vol. II. New York: Academic Press, 1971. (Chapters 3, 9, 10)

LOOMIS, LYNN H., AND SHLOMO STERNBERG, *Advanced calculus*. Reading, Mass.: Addison-Wesley, 1968.

MARGENAU, HENRY, AND GEORGE MOSELEY MURPHY, *The mathematics of physics and chemistry*. New York: D. Van Nostrand, 1943. New York: Krieger, 1976.

MARION, JERRY B., *Principles of vector analysis*. New York: Academic Press, 1965. Second ed., 1970. (Chapter 4)

MATHEWS, JON, AND R. L. WALKER, *Mathematical methods of physics*. New York: W. A. Benjamin, 1965. Second ed., 1970.

MCINTOSH, HAROLD. *See* LoebL, Ernest M.

Merzbacher, Eugen, *Quantum mechanics*. New York: Wiley, 1961. Second ed., 1970.

MUNK, WALTER H., AND GORDON J. F. MACDONALD, *The rotation of the earth, a geophysical discussion*. Cambridge: Cambridge University Press, 1960. (Chapter 5)

NERING, EVAR D., *Linear algebra and matrix theory*. New York: Wiley, 1963.

NEWTON, ROGER G., *Scattering theory of waves and particles*. New York: McGraw-Hill, 1966. (Chapter 3)

PANOFSKY, WOLFGANG K. H., AND MELBA PHILLIPS, *Classical electricity and magnetism*, 2nd ed. Reading Mass.: Addison-Wesley, 1962.

- PARS, L. A., *An introduction to the calculus of variations*. New York: Wiley, 1962. (Chapter 2)
- PEARSON, CARL E., ed., *Handbook of applied mathematics*. New York: Van Nostrand Reinhold, 1974.
- PEASE, MARSHAL C., III, *Methods of matrix algebra*. New York: Academic Press, 1965.
- LORD RAYLEIGH, *The theory of sound* (2 vols.), 2nd ed. London: Macmillan, 1894-1896. New York: Dover, 1945. (Chapters 1, 12)
- ROSE, M. E., *Elementary theory of angular momentum*. New York: Wiley, 1957.
- ROZENTAL, S., *Niels Bohr: His life and work*. Amsterdam: North-Holland, 1967. New York: Wiley, 1967.
- RUND, HANNO, *The Hamilton-Jacobi theory in the calculus of variations*. London: D. Van Nostrand, Ltd., 1966. (Chapters 2, 7, 8, 9)
- SCHIFF, LEONARD I., *Quantum mechanics*, 3rd ed. New York: McGraw-Hill, 1968.
- SMIRNOV, V. I., *A course of higher mathematics* (5 vols.). Translated from Russian. Oxford: Pergamon Press, 1964.
- SOMMERFELD, ARNOLD, *Atomic structure and spectral lines*. Translated by H. L. Brose from the 5th German edition of 1931. New York: Dutton, 1934. (Chapter 10)
- STACEY, FRANK D., *Physics of the earth*. New York: Wiley, 1969. Second ed., 1977. (Chapters 4, 5)
- STOLL, ROBERT R., *Linear algebra and matrix theory*. New York: McGraw-Hill, 1952. Reprint, New York: Dover, 1969. (Chapter 4)
- STRANG, GILBERT, *Linear algebra and its applications*. New York: Academic Press, 1976.
- SYNGE, J. L., *Geometrical optics*. Cambridge: Cambridge University Press, 1937.
- SYNGE, J. L., AND A. SCHILD, *Tensor calculus*. Toronto: University of Toronto Press, 1949. (Chapters 4, 6, 7)
- TOLMAN, RICHARD C., *The principles of statistical mechanics*. Oxford: Oxford University Press, 1938. (Chapter 9)
- TURNBULL, H. W., *The theory of determinants, matrices and invariants*, 2nd ed. London: Blackie, 1945.

VAN VLECK, J. H., *Quantum principles and line spectra*. Bulletin No. 54 of the National Research Council. Washington, D.C.: National Research Council, 1926. (Chapter 10)

WEINSTOCK, ROBERT, *Calculus of variations*. New York: McGraw-Hill, 1952. (Chapter 2)

WENTZEL, GREGOR, *Quantum theory of fields*. Translated by C. Houtermans and J. W. Jauch. New York: Interscience, 1949. (Chapter 12)

WEYL, HERMAN, *The classical groups*. Princeton: Princeton University Press, 1939. Second ed., reprint of first, with additions, 1946.

WHITHAM, G. B., *Linear and nonlinear waves*. New York: Wiley, 1974.

WIGNER, EUGENE P., *Group theory, and its application to the quantum mechanics of atomic spectra*. Translated from German by J. J. Griffin. New York: Academic Press, 1959.

WILLS, A. P., *Vector analysis, with an introduction to tensor analysis*. New York: Prentice-Hall, 1931. New York: Dover, 1931. (Chapter 5)

WILSON, E. BRIGHT, JR.; J. C. DECIUS; AND PAUL C. CROSS, *Molecular vibrations, the theory of infrared and Raman vibrational spectra*. New York: McGraw-Hill, 1955. (Chapter 6)

ZEMANSKY, MARK W., *Heat and thermodynamics*, 5th ed. New York: McGraw-Hill, 1968.

Tables of Integrals and Mathematical Function, and Other Works of Reference

ABRAMOWITZ, MILTON, AND IRENE A. STEGUN, eds., *Handbook of mathematical functions, with formulas, graphs and mathematical tables*. NBS Applied Math. Series 55. Washington, D.C.: Government Printing Office, 1964. New York: Dover, 1965.

GRADSHTEYN, I. S., AND I. M. RYZHIK, *Table of integrals, series and products*, 4th ed. Prepared by Yu V. Geronimus and M. Yu Tseytlin. Translated from Russian. New York: Academic Press, 1965.

PEIRCE, B. O., *A short table of integrals*, 3rd ed. Boston: Ginn, 1929. Fourth ed. (by B. O. Peirce and R. M. Foster), Boston: Ginn, 1956.

SELBY, SAMUEL M., ed., *Handbook of mathematical tables*. Cleveland, Ohio: Chemical Rubber Publishing Co. (CRC), 1962.

SPIEGEL, MURRAY R., *Mathematical handbook of formulas and tables*. New York: McGraw-Hill, 1968.