

Reference

- [1] M. Abramowitz, Asymptotic Expansions of Coulomb Wave Functions, *MR*, Vol. VII, No. 1 (1949), 75-84.
- [2] M. Abramowitz and I. A. Stegun, *Handbook of Mathematical Functions*, Dover, N.Y., 1972.
- [3] Akhiezer, N. I. and Glazman, I. M., *Theory of Linear Operators in Hilbert Space, Volume I*, Pitman, Boston, 1981. (English Translation).
- [4] Fayed A. Alhargan, A Complete Method for the Computations of Mathieu Characteristic Numbers of Integer Orders, *SIAM Rev.*, 38 NO.2 (1996), 239-255.
- [5] A. Allievi and A. Soudack, Ship Stability via the Mathieu Equation, *INT. J. CONTROL*, 51 NO.1 (1990), 139-167.
- [6] T. M. Apostol, *Mathematical Analysis (second edition)*, Addison-Wesley, 1974.
- [7] N. Asai, Y. Miyazaki, D. Cai, K. Hirasawa, and Y. Ikebe, Numerical Methods for $zJ'_\nu(z) + HJ_\nu(z) = 0$ by Eigenvalue Problem, *The Transactions of the Institute of Electronics, Information and Communication Engineers A*, Vol. J79-A No. 7 (1996), 1256-1265. (Later translated into English and appear in *Electronics and Communications in Japan*, Part 3, Vol. 80, No. 7 (1997), 44-54.)
- [8] G. Blanch and D. S. Clemm, *Mathieu's Equation for Complex Parameters, Table of Characteristic Values*, Aerospace Research Laboratories, 1969.
- [9] J. Boersma, Expansions for Coulomb Wave Functions, *Math. Comp.*, Vol. 23 (1969), 51-59.
- [10] F. Bowman, *Introduction to Bessel Functions*, Dover, 1958.
- [11] W. Gautschi, Computational Aspects of Three-Term Recurrence Relations, *SIAM Rev.*, 9 (1967), 24-82.
- [12] Y. Ikebe, The Zeros of Regular Coulomb Wave Functions and of Their Derivatives, *Math. Comp.*, 29(131), (1975), 878-887.
- [13] Y. Ikebe, N. Asai, Y. Miyazaki, and D. Cai, The Eigenvalue Problem for Infinite Complex Symmetric Tridiagonal Matrices with Application, *Linear Algebra and Its Applications*, 241-243 (1996), 599-618.

- [14] Y. Ikebe, Y. Kikuchi, and I. Fujishiro, Computing zeros and orders of Bessel functions, *J. Comp. and Appl. Math.*, 38 (1991), 169-184.
- [15] Y. Ikebe, Y. Kikuchi, I. Fujishiro, N. Asai, K. Takanashi, and M. Harada, The Eigenvalue Problem for Infinite Compact Complex Symmetric Matrices with Application to the Numerical Computation of Complex Zeros of $J_0(z) - iJ_1(z)$ and of Bessel Functions $J_m(z)$ of Any Real Order m , *Linear Algebra and Its Applications*, 194 (1993), 35-70.
- [16] Y. Ikebe, Y. Kikuchi, Y. Miyazaki, and D. Cai, Infinite Matrices and Special Function Computations, *the Fourth IMACS International Symposium on Iterative Methods in Scientific Computation (Austin, Texas)*, also in a book entitled “*Iterative Methods in Scientific Computation IV*” in the “*IMACS Series in Computational and Applied Mathematics*”, (1999), 291-296.
- [17] Y. Kikuchi, N. Asai, Y. Miyazaki, D. Cai, I. Fujishiro, and Y. Ikebe, Matrix Algorithm for the Computation of Zeros of Nonnegative Order Bessel Functions, *Transactions of the Japan Society for Industrial and Applied Mathematics*, 3(4), (1993), 425-437 (in Japanese).
- [18] M. A. Krasnosel'skii, G. M. Vainikko, P. P. Zabreiko, Ya. B. Rutitskii, and V. Ya. Stetsenko, *Approximate Solution of Operator Equations*, Wolters-Noordhoff, Groningen, (1972). (English Translation).
- [19] W. R. Leeb, ALGORITHM 537, Characteristic Values of Mathieu's Differential Equation [S22], *ACM Transactions on Mathematical Software*, Vol. 5 (1979), 112-117.
- [20] McLachlan, N. W., *Theory and Application of Mathieu Functions*, Dover, N.Y., 1964.
- [21] Y. Miyazaki, N. Asai, D. Cai, and Y. Ikebe, A Numerical Computation of the Inverse Characteristic Values of Mathieu's Equation, *Transactions of the Japan Society for Industrial and Applied Mathematics*, 8(2), (1998), 199-222 (in Japanese).
- [22] Y. Miyazaki, N. Asai, D. Cai, and Y. Ikebe, The Computation of Eigenvalues of Spheroidal Differential Equations by Matrix Method, *JSIAM Annual Meeting*, (1997), 224-225 (in Japanese).
- [23] Y. Miyazaki, Y. Kikuchi, D. Cai, and Y. Ikebe, Error Analysis for the Computation of Zeros of Regular Coulomb Wave Function and Its First Derivative, *Mathematics of Computation*, to appear.

- [24] Y. Miyazaki, Y. Kikuchi, D. Cai, and Y. Ikebe, The Computation of Double Eigenvalues for Infinite Matrices of a Certain Class with Newton's Method, Abstracts of Plenary and Invited Lectures Deliverd at the Second Congress ISAAC 1999 (1999), 148–149.
- [25] Y. Miyazaki, Y. Kikuchi, D. Cai, and Y. Ikebe, The Numerical Computation of Zeros of Regular Coulomb Wave Functions and of Their Derivatives, Abstracts of Plenary and Invited Lectures Deliverd at the Second Congress ISAAC 1999 (1999), 146–147.
- [26] F. Riesz and B. S. Nagy, *Functional Analysis*, Dover, N.Y., 1990.
- [27] G. F. Simmons, *Introduction to Topology and Modern Analysis*, MgGraw Hill, 1963.
- [28] B. T. Smith, J. M. Boyle, J. J. Dongarra, B. S. Garbow, Y. Ikebe, V. C. Klema, and C. B. Moler, *Matrix Eigensystem Routines - EISPACK Guide, Second Edition*, Springer-Verlag, 1976.
- [29] G. N. Watson, *A Treatise on the Theory of Bessel Functions*, Cambridge Univ. Press, 1944.
- [30] J. H. Wilkinson, *The Algebraic Eigenvalue Problem*, Oxford Univ. Press, 1965.
- [31] J. Wimp, *Computation with Recurrence Relation*, Pitman Publishing, Boston, MA, 1984.
- [32] S. Yamashita, On the Calculation of Eigenvalues of Mathieu Function, *Journal of Information Processing Society of Japan*, 33 (11) (1992), 1290-1295 (in Japanese).