

Leading journals in Numerical Analysis / Scientific Computing

[ACM Transactions on Mathematical Software](#)
[Acta Numerica](#)
[Foundations of Computational Mathematics](#)
[IMA Journal of Numerical Analysis](#)
[Journal of Computational and Applied Mathematics](#)
[Journal of Computational Physics](#)
[Mathematics of Computation](#)
[Numerische Mathematik](#)
[SIAM Journal on Matrix Analysis and Applications](#)
[SIAM Journal on Numerical Analysis](#)
[SIAM Journal on Scientific Computing](#)
[SIAM Review](#)

Some books to be aware of

E. Anderson, et al., [LAPACK Users' Guide](#), 3rd ed., SIAM, 1999
 Z. Bai, et al., [Templates for the Solution of Algebraic Eigenvalue Problems](#), SIAM, 2000, online at <http://www.cs.utk.edu/~dongarra/etemplates/>.
 R. Barrett, et al., [Templates for the Solution of Linear Systems](#), SIAM, 1994, online at http://www.netlib.org/linalg/html_templates/Templates.html
 Å. Björck, [Numerical Methods in Matrix Computations](#), SIAM, 1996 (especially for least-squares problems)
 T. A. Davis, [Direct Methods for Sparse Linear Systems](#), SIAM, 2006
 T. A. Driscoll, [Learning Matlab](#), SIAM, 2009
 G. H. Golub and C. Van Loan, [Matrix Computations](#), 4rd ed., Johns Hopkins U. Press, 2012
 A. Greenbaum, [Iterative Methods for Solving Linear Systems](#), SIAM, 1997
 D. J. Higham and N. J. Higham, [MATLAB Guide](#), 2nd ed., SIAM, 2005
 MathWorks, Inc., [Matlab documentation site](#),
<http://www.mathworks.com/access/helpdesk/help/helpdesk.shtml>
 J. Nocedal and S. J. Wright, [Numerical Optimization](#), 2nd ed., Springer, 2006
 M. Overton, [Numerical Computing with IEEE Floating Point Arithmetic](#), SIAM, 2000
 Y. Saad, [Numerical Methods for Large Eigenvalue Problems](#), 2nd ed, SIAM, 2003, online at <http://www-users.cs.umn.edu/~saad/books.html>
 Y. Saad, [Numerical Methods for Sparse Linear Systems](#), online at <http://www-users.cs.umn.edu/~saad/books.html>
 L. N. Trefethen and D. Bau, III, [Numerical Linear Algebra](#), SIAM, 1997
 H. van der Vorst, [Lecture Notes on Iterative Methods](#) and [Computational Methods for Large Eigenvalue Problems](#), in Handbook of Numerical Analysis, Elsevier, 2002.
 D. S. Watkins, [Fundamentals of Matrix Computations](#), 3rd ed., Wiley, 2010.
 D. S. Watkins, [The Matrix Eigenvalue Problem](#), SIAM, 2007.