

## Books

- [B1] RECENT ADVANCES IN NUMERICAL ANALYSIS, edited by Carl de Boor and Gene H. Golub, Academic Press (1978).
- [B2] PROCEEDINGS OF SYMPOSIA IN APPLIED MATHEMATICS, VOLUME XXII, NUMERICAL ANALYSIS, edited by Gene H. Golub and Joseph Oliger, American Mathematical Society (1978).
- [B3] MATRIX COMPUTATIONS, Gene H. Golub and Charles Van Loan, Johns Hopkins University Press (1983).
- [B4] RÉOLUTION NUMÉRIQUE DES GRANDS SYSTÈMES LINÉAIRES, Gene H. Golub and Gérard A. Meurant, Editions Eyrolles (1983).
- [B5] STUDIES IN NUMERICAL ANALYSIS, edited by Gene H. Golub, The Mathematical Association of America (1984).
- [B6] FIRST INTERNATIONAL SYMPOSIUM ON DOMAIN DECOMPOSITION METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, edited by Roland Glowinski, Gene H. Golub, Gérard Meurant, and Jacques Périaux, SIAM (1988).
- [B7] MATRIX COMPUTATIONS, Gene H. Golub and Charles Van Loan, Johns Hopkins University Press, 2nd edition (1989).
- [B8] NUMERICAL LINEAR ALGEBRA, DIGITAL SIGNAL PROCESSING AND PARALLEL ALGORITHMS, edited by Gene H. Golub and Paul Van Dooren, NATO ASI Series, Series F: Computer and Systems Sciences, Vol. 70, Springer Verlag (1991).
- [B9] SCIENTIFIC COMPUTING AND DIFFERENTIAL EQUATIONS. AN INTRODUCTION TO NUMERICAL METHODS, Gene H. Golub and James M. Ortega, Academic Press, Inc., Harcourt Brace Jovanovich, Publishers (1992).
- [B10] LINEAR ALGEBRA FOR LARGE SCALE AND REAL-TIME APPLICATIONS, edited by Marc S. Moonen, Gene H. Golub and Bart L. R. De Moor, NATO ASI Series, Kluwer Academic Publishers, Norwell, MA 02061 (1993).
- [B11] SCIENTIFIC COMPUTING. AN INTRODUCTION WITH PARALLEL COMPUTING, Gene Golub and James M. Ortega, Academic Press, Inc. (1993).
- [B12] RECENT ADVANCES IN ITERATIVE METHODS, edited by Gene H. Golub, A. Greenbaum and M. Luskin, Springer-Verlag (1993).
- [B13] ITERATIVE METHODS IN SCIENTIFIC COMPUTING, edited by Raymond H. Chan, Tony F. Chan, and Gene H. Golub, Springer-Verlag (1997).
- [B14] MATRIX COMPUTATIONS, Gene H. Golub and Charles Van Loan, Johns Hopkins University Press, 3rd edition (1996).
- [B15] SCIENTIFIC COMPUTING, Editor-in-Chief Gene H. Golub, Springer (1997).
- [B16] APPLICATIONS AND COMPUTATION OF ORTHOGONAL POLYNOMIALS, edited by W. Gautschi, Gene H. Golub and G. Opfer, Birkhäuser (1999).

- [B17] ITERATIVE METHODS AND MATRIX COMPUTATIONS, Lectures of Instructor and Abstracts of Young Scientists. edited by Gene H. Golub and Lev A. Krukier. Rostov State University, Rostov-on-Don, Russia. (2-9 June 2002).

## Thesis

- [T1] *The use of Chebyshev matrix polynomials in the iterative solution of linear equations compared to the method of successive over-relaxation*, Ph.D. Dissertation, University of Illinois (1959).

## Conference Papers and Book Chapters

- [C1] *Matrix decompositions and statistical calculations*, in STATISTICAL COMPUTATION, Academic Press, Inc., 365–397, 1969.
- [C2] (with M. A. Saunders), *Linear least squares and quadratic programming*, in INTEGER AND NONLINEAR PROGRAMMING, J. Abadie (ed.), North-Holland Publishing Co., 229–256, 1970.
- [C3] (with R. H. Bartels and M. A. Saunders), *Numerical techniques in mathematical programming*, in NONLINEAR PROGRAMMING, Academic Press, Inc., 123–176, 1970.
- [C4] *Direct methods for solving elliptic difference equations*, in SYMPOSIUM ON THE THEORY OF NUMERICAL ANALYSIS, John L. Morris (ed.), Springer-Verlag, 1–19, 1971.
- [C5] (with W. Dent), *Computation of the limited information maximum likelihood estimator*, in PROCEEDINGS OF THE COMPUTER SCIENCE AND STATISTICS 6TH ANNUAL SYMPOSIUM ON THE INTERFACE, M. Tarter(ed.), Western Periodicals Co., 60–65, 1973.
- [C6] *Some uses of the Lanczos algorithm in numerical algebra*, in TOPICS IN NUMERICAL ANALYSIS, John J. H. Miller (ed.), Academic Press, Inc., 173–184, 1973.
- [C7] (with G. B. Dantzig, R. W. Cottle, B. C. Eaves, F. S. Hillier, A. S. Manne, D. J. Wilde and R. B. Wilson), *On the need for a System Optimization Laboratory*, in MATHEMATICAL PROGRAMMING, Academic Press, Inc., New York/London, 1–32, 1973.
- [C8] (with George P. H. Styan), *Some aspects of numerical computations for linear models*, in PROCEEDINGS OF THE COMPUTER SCIENCE AND STATISTICS SEVENTH ANNUAL SYMPOSIUM ON THE INTERFACE, Iowa State University, 189–192, 1973.
- [C9] (with Irwin Guttman and Rudolf Dutter), *Examination of pseudo-residuals of outliers for detecting spurocity in the general univariate linear model*, in MULTIVARIATE STATISTICAL INFERENCE; PROCEEDINGS OF THE RESEARCH SEMINAR DALHOUSIE UNIVERSITY, HALIFAX, March 23–25, 1972, D. J. Kabe and R. P. Gupta (eds.), North-Holland, 63–108, 1973.
- [C10] *Methods for computing eigenvalues of sparse matrix equations*, ACTAS DEL SEMINARIO SOBRE METODOS NUMERICOS MODERNO, Volume I, V. Pereyra (ed.), Universidad Central de Venezuela, 127–148, 1974.

- [C11] \* (with Paul Concus), *A generalized conjugate gradient method for non-symmetric systems of linear equations*, Second International Symposium on Computing Methods in Applied Sciences and Engineering, Versailles, France, December 15–19; Lecture Notes in Economics and Mathematical Systems, vol. 134, Springer-Verlag, 56–65, (1976).
- [C12] *Sparse matrix computations: Eigenvalues and linear equations*, SEMINARIES IRIA, Inst. Rech. D’Informatique et d’Automatique, Rocquencourt, 117–140, 1975.
- [C13] (with V. Pereyra), *Differentiation of pseudoinverses, separable nonlinear least squares problems, and other tales*, in GENERALIZED INVERSES AND APPLICATIONS, M. Nashed (ed.), Academic Press, 1976.
- [C14] \* (with Paul Concus and Dianne O’Leary), *A generalized conjugate gradient method for the numerical solution of elliptic partial differential equations*, in PROCEEDINGS OF SPARSE MATRIX CONFERENCE, SPARSE MATRIX COMPUTATION, J. R. Bunch and D. J. Rose, eds., Academic Press, Inc., 309–332, 1976.
- [C15] (with Alan K. Cline and George W. Platzman), *Calculation of normal modes of oceans using a Lanczos method*, in PROCEEDINGS OF SPARSE MATRIX CONFERENCE, SPARSE MATRIX COMPUTATIONS, Academic Press, Inc., 409–426, 1976.
- [C16] (with F. Luk), *Singular value decomposition: applications and computations*, in PROCEEDINGS OF 1976 ARMY NUMERICAL ANALYSIS AND COMPUTERS CONFERENCE.
- [C17] \* (with R. Underwood), *The block Lanczos method for computing eigenvalues*, in PROCEEDINGS OF THE SYMPOSIUM ON MATHEMATICAL SOFTWARE, University of Wisconsin, Madison, March 1977.
- [C18] (with B. L. Buzbee and J. A. Howell), *Vectorization for the CRAY-1 of some methods for solving elliptic difference equations*, in PROCEEDINGS OF THE SYMPOSIUM ON HIGH SPEED COMPUTER AND ALGORITHM ORGANIZATION, University of Illinois at Urbana-Champaign, April 1977.
- [C19] (with D. Boley), *Inverse eigenvalue problems for band matrices*, in PROCEEDINGS OF CONFERENCE ON NUMERICAL ANALYSIS, Dundee, Scotland, June 1977.
- [C20] (with D. Boley), *The matrix inverse eigenvalue problem for periodic Jacobi matrices*, in PROCEEDINGS OF THE FOURTH CONFERENCE ON BASIC PROBLEMS OF NUMERICAL ANALYSIS, (LIBLICE IV), Pilsen, Czechoslovakia, September 1978.
- [C21] (with G. Dahlquist and S. Nash), *Bounds for the error in linear systems*, in PROCEEDINGS OF THE WORKSHOP ON SEMI-INFINITE PROGRAMMING, Bad Honnef, West Germany, August 30–September 1, 1978.
- [C22] (with C. Van Loan), *Total least squares*, in SMOOTHING TECHNIQUES FOR CURVE ESTIMATION, Proceedings, Heidelberg, 1979.
- [C23] (with R. LeVeque), *Extensions and uses of the variable projection algorithm for solving nonlinear least squares problems*, in PROCEEDINGS OF THE 1979 ARMY NUMERICAL ANALYSIS AND COMPUTERS CONFERENCE, 1979.

- [C24] (with F. Luk and M. Pagano), *A large sparse least squares problem in photogrammetry*, in PROCEEDINGS OF THE 12TH ANNUAL SYMPOSIUM ON THE INTERFACE, University of Waterloo, May 1979.
- [C25] (with R. Plemmons), *Sparse least squares problems*, in PROCEEDINGS OF THE IRIA FOURTH INTERNATIONAL SYMPOSIUM ON COMPUTING METHODS IN APPLIED SCIENCE AND ENGINEERING, Versailles, France, December 1979.
- [C26] (with M. Overton), *Convergence of a two-stage Richardson iterative procedure for solving systems of linear equations*, presented at the Dundee Biennial Conference on Numerical Analysis, University of Dundee, Scotland, June 23-26, 1981; in the Proceedings of the Conference, Springer-Verlag.
- [C27] (with T. Chan and R. LeVeque), *Updating formulae and a pairwise algorithm for computing sample variances*, presented at the COMPSTAT '82 in Toulouse, France, September 1982; in the PROCEEDINGS OF THE COMSTAT'82 CONFERENCE.
- [C28] (with D. Mayers), *The use of pre-conditioning over irregular regions*, presented at the INRIA SIXTH INTERNATIONAL CONFERENCE ON COMPUTING METHODS IN APPLIED SCIENCES AND ENGINEERING, Versailles, France, 1983.
- [C29] (with J. H. Ferziger and M. C. Thompson), *Block SOR applied to the cyclically-reduced equations as an efficient solution technique for convection-diffusion equations*, in Proceedings of COMPUTATIONAL TECHNIQUES AND APPLICATIONS: CTAC-87, Elsevier Science Publishers, North Holland, 1987.
- [C30] *Large Scale Least Squares Problems*, in COMPUTER SCIENCE AND STATISTICS: PROCEEDINGS OF THE 19TH SYMPOSIUM ON THE INTERFACE, Philadelphia, PA, USA, 1987.
- [C31] (with Robert J. Plemmons and Ahmed Sameh), *Parallel block schemes for large-scale least-squares computations*, in High-Speed Computing: Scientific Applications and Algorithm Design, 171-179, University of Illinois Press, 1988.
- [C32] (with W. Gander, U. von Matt), *A Constrained Eigenvalue Problem*, in NUMERICAL LINEAR ALGEBRA, DIGITAL SIGNAL PROCESSING AND PARALLEL ALGORITHMS. PROCEEDINGS OF THE NATO ADVANCED STUDY INSTITUTE., Leuven, Belgium, Aug. 1-12, 1988.
- [C33] (with Howard Elman), *Line iterative methods for cyclically reduced non-self-adjoint elliptic problems*, Proceedings of Seventh Army Conference on Applied Mathematics and Computing, 1989.
- [C34] (with Walter Gander and Dominik Gruntz) *Solving linear equations by extrapolation*, SUPERCOMPUTING, J. S. Kovalik(ed.), Nato ASI Series, Springer, 1990.
- [C35] (with John E. De Pillis), *Toward an effective two-parameter SOR method*, in PROCEEDINGS OF ITERATIVE METHODS FOR LARGE LINEAR SYSTEMS, 107-119, Academic Press, 1990.
- [C36] (with W. R. Ferng, R. J. Plemmons), *Adaptive Lanczos Methods for Recursive Condition Estimation*, in PROCEEDINGS OF THE SPIE - THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, Vol. 1348, 326-37, 1990.

- [C37] (with D. Boley), *A Modified Non-symmetric Lanczos Algorithm and Applications*, in SVD AND SIGNAL PROCESSING, II. ALGORITHMS, ANALYSIS AND APPLICATIONS. Kingston, RI, USA, 1990.
- [C38] (with Sylvan Elhay and Jaroslav Kautsky), *Updating and downdating of orthogonal polynomials with data fitting applications*, NUMERICAL LINEAR ALGEBRA, DIGITAL SIGNAL PROCESSING AND PARALLEL ALGORITHMS, edited by G.H. Golub and P. Van Dooren, NATO ASI Series, Vol. F. 70, 149–172, Springer, 1991.
- [C39] (with A. Bojanczyk and P. Van Dooren), *The periodic Schur decomposition: Algorithms and applications*, in SPIE, 1770, 31–42, 1992.
- [C40] (with D. Calvetti and L. Reichel), *Gaussian quadrature applied to adaptive Chebyshev Iteration*, in RECENT ADVANCES IN ITERATIVE METHODS, G. Golub, A. Greenbaum, and M. Luskin (eds.), Springer-Verlag, 1993.
- [C41] (with Bernd Fischer), *On the error computation for polynomial based iteration methods*, in RECENT ADVANCES IN ITERATIVE METHODS, G. Golub, A. Greenbaum, and M. Luskin (eds.), Springer-Verlag, 1993.
- [C42] (with R. W. Freund and N. M. Nachtigal), *Recent advances in Lanczos-based iterative methods for nonsymmetric linear systems*, in ALGORITHMIC TRENDS IN COMPUTATIONAL FLUID DYNAMICS, M. Y. Hussaini, A. Kumar and M. D. Salas (eds.), Springer-Verlag, 1993.
- [C43] \* (with Gérard Meurant), *Matrices, moments and quadrature*, in PROCEEDINGS OF THE 15TH DUNDEE CONFERENCE, JUNE-JULY 1993, D. F. Griffiths and G. A. Watson (eds.), Longman Scientific & Technical, 1994.
- [C44] (with Oliver Ernst), *A domain decomposition approach to solving the Helmholtz equation with a radiation boundary condition*, in CONTEMPORARY MATHEMATICS, 157, of PROCEEDINGS OF THE 6TH INTERNATIONAL DOMAIN DECOMPOSITION MEETING, 177–192 (1994).
- [C45] (with Hongyuan Zha), *The canonical correlations of matrix pairs and their numerical computation*, in LINEAR ALGEBRA FOR SIGNAL PROCESSING (Minneapolis, MN, 1992), 27–49, IMA Vol. Math. Appl., 69, Springer, New York, 1995
- [C46] (with David Silvester and Andy Wathen), *Diagonal dominance and positive definiteness of upwind approximations for advection diffusion problems*, in NUMERICAL ANALYSIS, DF Griffiths and GA Watson (eds.), World Scientific, 125–131, (1996).
- [C47] (with Urs Von Matt) *Generalized cross-validation for large scale problems*, in RECENT ADVANCES IN TOTAL LEAST SQUARES TECHNIQUES AND ERRORS-IN-VARIABLES MODELING, Sabine Van Huffel (ed), SIAM, 139–148, (1997).
- [C48] (with Henk A. van der Vorst), *150 Years Old and Still Alive: Eigenproblems*, THE STATE OF THE ART IN NUMERICAL ANALYSIS, I.S.Duff and G.A.Watson (eds), Clarendon Press, Oxford, 93-119, (1997).
- [C49] (with Henk A. van der Vorst), *Closer to the solution: Iterative Linear Solvers*, THE STATE OF THE ART IN NUMERICAL ANALYSIS, I.S.Duff and G.A.Watson (eds), Clarendon Press, Oxford, 63-92, (1997).

- [C50] (with Shivkumar Chandrasekaran, Ming Gu, Ali. H. Sayed) *Efficient algorithms for least squares type problems with bounded uncertainties*, in RECENT ADVANCES IN TOTAL LEAST SQUARES TECHNIQUES AND ERRORS-IN-VARIABLES MODELING, Sabine Van Huffel (ed), SIAM, 171–182, (1997).
- [C51] (with Urs von Matt), *Tikhonov regularization for large scale problems*, in SCIENTIFIC COMPUTING, Gene Howard Golub(ed), Springer, 3–26, (1997).
- [C52] (with Knut Solna and Paul van Dooren), *Computing the SVD of a General Matrix Product/Quotient*, SIAM J. MATRIX ANAL. APPL. 22 (2000), no. 1, 1–19.
- [C53] (with Walter Gander), *Cyclic reduction – history and applications*, in SCIENTIFIC COMPUTING, Gene Howard Golub(ed), Springer, 73–85, (1997).
- [C54] (with Michael Drexler), *Efficient solution of the Jacobian system in Newton’s method close to a root*, in SCIENTIFIC COMPUTING, Gene Howard Golub(ed), Springer, 202 – 209, (1997).
- [C55] (with N. Nguyen and P. Milanfar), *Preconditioners for Regularized Image Superresolution*, in ICASSP ’99, Vol. VI, pp. 3249–3252, Phoenix, AZ.
- [C56] (with N. Nguyen and P. Milanfar), *Blind Restoration/Superresolution with Generalized Cross-Validation using Gauss-Type Quadrature Rules*, in Proceedings of the 33rd Asilomar Conference on Signals, Systems, and Computers, Monterey, CA, Oct. 24-27, 1999.
- [C57] (with Zhaojun Bai), *Some Unusual Matrix Eigenvalue Problems*, in VECTOR AND PARALLEL PROCESSING - VECPAR’98 THIRD INTERNATIONAL CONFERENCE , Porto, Portugal, June 21-23, 1998. LECTURE NOTES IN COMPUTER SCIENCE, 1573, pp. 4-19, 1999.
- [C58] (with Peyman Milanfar, Mihai Putinar, James Varah and Björn Gustafsson), *Shape Reconstruction From Moments: Theory, Algorithms, and Applications*, in PROCEEDINGS OF SPIE VOL.4116 ON ADVANCED SIGNAL PROCESSING ALGORITHMS, ARCHITECTURES, AND IMPLEMENTATIONS X, San Diego, USA, August 2-4, 2000.
- [C59] (with D. Vanderstraeten), *On the Preconditioning of Matrices with Skew-Symmetric Splittings*, in NUMERICAL ALGORITHMS, Vol. 25, No. 1-4, p. 223-39, 2001.
- [C60] (with B. Engquist), *From Numerical Analysis to Computational Science*, MATHEMATICS UNLIMITED, 433-448, B. Enquist and W. Schmid (Eds.), Springer, 2001.
- [C61] (with Zhaojun Bai), *Computation of large-scale quadratic forms and transfer functions using the theory of moments, quadrature and Pade approximation* in MODERN METHODS IN SCIENTIFIC COMPUTING AND APPLICATIONS, edited by A..Bourlioux and M. J. Gander, NATO Science Series, II. Mathematics, Physics and Chemistry, Vol 75, 2002.
- [C62] (with Yong Sun, Nate Folwell and Zenghai Li), *High Precision Accelerator Cavity Design Using the Parallel Eigensolver Omega3P*. Winner of the 2002 ACES Best Paper Award.
- [C63] (with M. J. Gander) *A non-overlapping optimized Schwarz method which converges with arbitrarily weak dependence on h*. Domain decomposition methods in science and engineering, 281–288 Natl. Auton. Univ. Mex., Mxico, 2003.

- [C64] (with S. D. Kamvar, T. H. Haveliwala, and C. D. Manning), *Extrapolation methods for accelerating PageRank computations*. International World Wide Web Conference Proceedings of the 12th international conference on World Wide Web, ACM, Budapest, Hungary, 261 - 270, 2003.
- [C65] (with D. B. Clayton, S. Skare, M. Modarresi, R. Bammer), *Augmented SENSE Reconstruction by an Improved Regularization Approach*, PROCEEDINGS OF THE INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE 13th Annual Meet: 2440, (2005)

## Journal Publications

- [J1] \* (with R. S. Varga), *Chebyshev semi-iterative methods, successive over-relaxation iterative methods, and second-order Richardson iterative methods, Parts I and II*, NUMER. MATH. 3, 147–168 (1961).
- [J2] *Bounds for the round-off errors in the Richardson second order method*, BIT 2, 212–223 (1962).
- [J3] *Bounds for eigenvalues of tridiagonal symmetric matrices computed by the LR method*, MATH. COMP. 16, 438–445 (1962).
- [J4] *On the lower bound for the rank of a partitioned square matrix*, MATH. COMP. 17, 186–188 (1963).
- [J5] *Comparison of the variance of minimum variance and weighted least squares regression coefficients*, ANN. MATH. STATIST. 34, 984–991 (1963).
- [J6] \* *Numerical methods for solving linear least squares problems*, NUMER. MATH. 7, 206–216 (1965).
- [J7] (with P. Businger), *Linear least squares solutions by Householder transformations*, NUMER. MATH. 7, 269–276 (1965).
- [J8] \* (with W. Kahan), *Calculating the singular values and pseudo-inverse of a matrix*, SIAM J. NUMER. ANAL. 2, Ser. B., 205–224 (1965).
- [J9] (with G. E. Forsythe), *On the stationary values of a second-degree polynomial on the unit sphere*, J. SOC. INDUST. APPL. MATH. 13, 1050–1068 (1965).
- [J10] (with J. H. Wilkinson), *Note on the iterative refinement of least squares solution*, NUMER. MATH. 9, 139–148 (1966).
- [J11] (with A. Björck), *Iterative refinement of linear least squares solution by Householder transformation*, BIT 7, 322–337 (1967).
- [J12] (with T. N. Robertson), *A generalized Bairstow algorithm*, COMM. ACM 10, 371–373 (1967).
- [J13] *Least squares, singular values and matrix approximations*, APPL. MAT. 13, 44–51 (1968).

- [J14] (with R. H. Bartels), *Stable numerical methods for obtaining the Chebyshev solution to an overdetermined system of equations*, COMM. ACM 11, 401–406 (1968).
- [J15] (with R. H. Bartels), *Chebyshev solution to an overdetermined linear system*, An ALGOL algorithm, COMM. ACM 11, 428–430 (1968).
- [J16] \* (with R. H. Bartels), *The simplex method of linear programming using LU decomposition*, COMM. ACM 12, 266–268 (1969).
- [J17] (with R. H. Bartels), *Simplex method procedure employing LU decomposition*, an ALGOL algorithm, COMM. ACM 12, 275–278 (1969).
- [J18] \* (with J. H. Welsch), *Calculation of Gauss quadrature rules*, MATH. COMP. 23, 221–230 (1969).
- [J19] (with P. A. Businger), *Singular value decomposition of a complex matrix*, Algorithm 358, COMM. ACM 12, 564–565 (1969).
- [J20] \* (with C. Reinsch), *Singular value decomposition and least squares solutions*, NUMER. MATH. 14, 403–420 (1970).
- [J21] \* (with B. L. Buzbee and C. W. Nielson), *On direct methods for solving Poisson's equation*, SIAM J. NUMER. ANAL. 7, 627–656 (1970).
- [J22] (with B. L. Buzbee, F. W. Dorr, J. A. George), *The direct solution of the discrete Poisson equation on irregular regions*, SIAM J. NUMER. ANAL. 8, 722–736 (1971).
- [J23] (with L. Smith), *Chebyshev approximation of continuous functions by a Chebyshev system of functions*, COMM. ACM 14, 737–746 (1971).
- [J24] (with G. Dahlquist and S. Eisenstat), *Bounds for the error of linear systems of equations using the theory of moments*, J. MATH. ANAL. APPL. 37, 151–166 (1972).
- [J25] \* (with A. Björck), *Numerical methods for computing angles between linear subspaces*, MATH. COMP. 27, 579–594 (1973).
- [J26] \* *Some modified matrix eigenvalue problems*, SIREV15, 318–335 (1973).
- [J27] (with G. P. H. Styan), *Numerical computations for univariate linear models*, J. STATIST. COMPUT. SIMUL. 2, 253–274 (1973).
- [J28] \* (with V. Pereyra), *The differentiation of pseudo-inverses and non-linear least squares problems whose variables separate*, SIAM J. NUMER. ANAL. 10, 413–432 (1973).
- [J29] (with P. Concus), *Use of fast direct methods for the efficient numerical solution of nonseparable elliptic equations*, SIAM J. NUMER. ANAL. 10, 1103–1120 (1973).
- [J30] (with E. Seneta), *Computation of the stationary distribution of an infinite Markov matrix*, BULL. AUSTRAL. MATH. SOC. 8, 333–341 (1973).
- [J31] (with J. Varah), *On a characterization of the best  $\ell_2$  scaling of a matrix*, SIAM J. NUMER. ANAL. 11, 472–479 (1974).
- [J32] \* (with P. E. Gill, W. Murray and M. A. Saunders), *Methods for modifying matrix factorizations*, MATH. COMP. 28, 505–535 (1974).



- [J33] (with D. Fischer, O. Hald, C. Leiva and O. Widlund), *On Fourier-Toeplitz methods for separable elliptic problems*, MATH. COMP. 28, 349–368 (1974).
- [J34] (with E. Seneta), *Computation of the stationary distribution of an infinite stochastic matrix of special form*, BULL. AUSTRAL. MATH. SOC. 10, 255–261 (1974).
- [J35] *Bounds for matrix moments*, ROCKY MOUNTAIN J. OF MATH. 4, 207–211 (1974).
- [J36] (with L. Jennings and W. Yang), *Waves in periodically structured media*, J. COMP. PHY. 17, 349–357 (1975).
- [J37] \* (with J. H. Wilkinson), *Ill-conditioned eigensystems and the computation of the Jordan canonical form*, SIREV18, 578–619 (1976).
- [J38] (with A. Björck), *Eigenproblems for matrices associated with periodic boundary conditions*, SIREV19, 5–16 (1977).
- [J39] (with P. Concus and D. O’Leary), *Numerical solution of nonlinear elliptic partial differential equations by generalized conjugate gradient method*, COMPUTING 19, 321–339 (1978).
- [J40] \* (with C. de Boor), *The numerically stable reconstruction of a Jacobi matrix from spectral data*, LINEAR ALG. AND ITS APPL. 21, 245–260 (1978).
- [J41] (with R. W. Cottle and R. S. Sacher), *On the solution of large structured linear complementarity problems: the block partitioned case*, APPL. MATH. OPTIM. 4, 347–363 (1978).
- [J42] (with W. Langlois), *Direct solution of the equation for the Stokes stream function*, COMP. METHODS IN APPL. MECH. AND ENGRG. 19, 391–399 (1979).
- [J43] \* (with M. Heath and G. Wahba), *Generalized cross-validation as a method for choosing a good ridge parameter*, TECHNOMETRICS 21, 2 215–223 (1979).
- [J44] (with S. Nash and C. Van Loan), *A Hessenberg-Schur method for the problem  $AX + XB = C$* , IEEE JOURNAL 24, 6, 909–913 (1979).
- [J45] (with C. Van Loan), *Unsymmetric positive definite linear systems*, LINEAR ALG. AND ITS APPL. 28, 85–97 (1979).
- [J46] (with R. Plemmons), *Large scale geodetic least squares adjustment by dissection and orthogonal decomposition*, LINEAR ALG. AND ITS APPL. 34, 3–27 (1980).
- [J47] \* (with C. Van Loan), *An analysis of the total least squares problem*, SIAM J. NUMER. ANAL. 17, 6, 883–893 (1980).
- [J48] (with R.C. Ward), *Numerical Linear Algebra*, SIAM J. NUMER. ANAL. 15, 3, 9–26 (1980).
- [J49] (with F. Luk and M. Overton), *A block Lanczos method for computing the singular values and corresponding singular vectors of a matrix*, ACM TRANS. MATH. SOFTWARE 7, 149–169 (1981).

- [J50] (with W. P. Tang), *The block decomposition of a Vandermonde matrix and its applications*, BIT 21, 505–517 (1981).
- [J51] (with S. Nash), *Nonorthogonal analysis of variance using a generalized Conjugate-gradient algorithm*, J. AMER. STATIS. ASSOC. 77, 377, 109–116 (1982).
- [J52] (with T. Chan and R. LeVeque), *Algorithms for computing the sample variance: analysis and recommendations*, STATISTICAL COMPUTING 37, 242–247 (1983).
- [J53] (with J. Kautsky), *Calculation of Gauss quadratures with multiple and free and fixed knots*, NUMER. MATH. 41, 147–163 (1983).
- [J54] (with J. Kautsky), *On the calculation of Jacobi matrices*, LINEAR ALG. AND ITS APPL. 52, 439–455 (1983).
- [J55] (with D. Boley), *A modified method for reconstructing periodic Jacobi matrices*, MATH. COMP. 42, 165, 143–150 (1984).
- [J56] (with R. Gallant), *Imposing curvature restrictions on flexible functional forms*, J. OF ECONOMETRICS 26, 295–321 (1984).
- [J57] (with D. L. Boley), *The Lanczos Arnoldi algorithm and controllability*, SYSTEMS AND CONTROL LETTERS 4, 6, 317–324 (1984).
- [J58] (with P. Concus and G. Meurant), *Block preconditioning for the conjugate gradient method*, SIAM J. ON SCIENTIFIC AND STATISTICAL COMP.6, 220–252 (1985).
- [J59] (with P. Manneback and Ph. L. Toint), *A comparison between some direct and iterative methods for large scale geodetic least squares problems*, SIAM J. ON SCIENTIFIC AND STATISTICAL COMP.7, 799–816 (1986).
- [J60] (with Carl D. Meyer, Jr.) *Using the QR factorization and group inversion to compute, differentiate, and estimate the sensitivity of stationary probabilities for Markov chains*, SIAM J. ALG. DISC. METH. 7:2, 273–281 (1986).
- [J61] (with R. Kannan), *Convergence of a two-stage Richardson process for nonlinear equations*, BIT 26, 209–216 (1986).
- [J62] (with Alan Hoffman and G. W. Stewart), *A generalization of the Eckart-Young-Mirsky matrix approximation theorem*, LINEAR ALG. AND ITS APPL. 88/89, 317–327 (1987).
- [J63] (with D. Boley), *A survey of matrix inverse eigenvalue problems*, INVERSE PROBLEMS 3, 595–622 (1987).
- [J64] (with P. Arbenz), *On the spectral decomposition of Hermitian matrices modified by low rank perturbations with applications*, SIAM J. MATRIX ANAL. APPL. 9, 40–58 (1988).
- [J65] (with P. Arbenz and W. Gander), *Restricted rank modification of the symmetric eigenvalue problem: theoretical considerations*, LINEAR ALG. AND ITS APPL. 104, 75–95 (1988).
- [J66] (with Michael L. Overton), *The convergence of inexact Chebyshev and Richardson iterative methods for solving linear systems*, NUMER. MATH. 53, 571–593 (1988).

- [J67] (with Dianne P. O’Leary), *Some history of the conjugate gradient and Lanczos algorithms: 1948-1976*, SIREV31, No. 1. 50–102 (1989).
- [J68] (with W.Gander and U.Von Matt), *A constrained eigenvalue problem*, LINEAR ALG. AND ITS APPL. 114, 815–839 (1989).
- [J69] (with Mark Kent), *Estimates of eigenvalues for iterative methods*, MATH. COMP. 53, 188, 619–626 (1989).
- [J70] (with M. Gutknecht), *Modified moments for indefinite weight functions*, NUMER. MATH. 57, 607–624 (1989).
- [J71] (with P. Comon), *Tracking a few extreme singular values and vectors in signal processing*, IEEE JOURNAL 78, No. 8, 1327–1343 (1990).
- [J72] (with H. Elman), *Iterative methods for cyclically reduced non-self-adjoint linear systems*, MATH. COMP. 54:190, 671–700 (1990).
- [J73] (with P. Arbenz), *QR-like algorithms for symmetric arrow matrices*, SIAM J. MATRIX ANAL. APPL. 13, 655–658 (1992).
- [J74] (with Michael Berry), *Estimating the largest singular values of large sparse matrices via modified moments*, NUMERICAL ALGORITHMS (1), 353–374 (1991).
- [J75] (with Daniel L. Boley, Sylvan Elhay and Martin H. Gutknecht), *Nonsymmetric Lanczos and finding orthogonal polynomials associated with indefinite weights*, NUMERICAL ALGORITHMS(1), No. 1, 21–43 (1991).
- [J76] (with B. De Moor), *The Restricted singular value decomposition: properties and applications*, SIAM J. MATRIX ANAL. APPL. 12, 401–425 (1991).
- [J77] (with S. Elhay and J. Kautsky), *Updating and downdating of orthogonal polynomials with data fitting applications*, SIAM J. MATRIX ANAL. APPL. 12, No. 2, 327–353 (1991).
- [J78] (with H. Elman), *Iterative methods for cyclically reduced non-self-adjoint linear systems II*, MATH. COMP. 56, No. 193, 215–242 (1991).
- [J79] (with William R. Ferg and Robert J. Plemmons), *Adaptive Lanczos methods for recursive condition estimation*, NUMERICAL ALGORITHMS(1), No. 1, 1–20 (1991).
- [J80] (with B. Fischer), *On generating polynomials which are orthogonal over several intervals*, MATH. COMP. 56, No. 194, 711–730 (1991).
- [J81] (with Roland W. Freund and Noël M. Nachtigal), *Iterative solutions of linear systems*, ACTA NUMERICA, 1–44 (1991).
- [J82] (with Urs Von Matt), *Quadratically constrained least squares and quadratic problems*, NUMER. MATH. 59, 561–580 (1991).
- [J83] (with Daniel L. Boley, Richard P. Brent and Franklin T. Luk) *Algorithmic fault tolerance using the Lanczos process*, SIAM J. MATRIX ANAL. APPL. 13, 312–332 (1992).

- [J84] (with Cheryl Carey, Hsin-Chu Chen and Ahmed Sameh), *A new approach for solving symmetric eigenvalue problems*, in COMPUTING SYSTEMS IN ENGINEERING, 3:6, 671–679, Pergamon Press (1992).
- [J85] (with Sylvan Elhay and Jaroslav Kautsky), *Jacobi matrices for sums of weight functions*, in BIT 32, 143–166 (1992).
- [J86] (with H. C. Elman) *Line iterative methods for cyclically reduced discrete convection-diffusion problems*, SIAM J. ON SCIENTIFIC AND STATISTICAL COMP.13, 339–363 (1992).
- [J87] (with Bernd Fischer), *How to generate unknown orthogonal polynomials out of known orthogonal polynomials*, J. COMPUTATIONAL & APPLIED MATH. 43, 99–115 (1992).
- [J88] (with Bo Kagström and Paul Van Dooren), *Direct block tridiagonalization of single-input single-output systems*, in SYSTEMS & CONTROL LETTERS, 18, 109–120 (1992).
- [J89] (with Daniel Boley, Samy Makar, Nirmal Saxena, and Edward J. McCluskey), *Floating point fault tolerance with backward error assertions*, submitted for publication in IEEE TRANS. COMP. (1993).  
Stanford University,
- [J90] (with Zdeněk Strakoš), *Estimates in quadratic formulas*, in NUMERICAL ALGORITHMS 8, 2–4, 241–268(1994).
- [J91] (with D. Calvetti and L. Reichel), *Adaptive Chebyshev iterative methods for nonsymmetric linear systems based on modified moments*, in NUMER. MATH. , 67, 21–40 (1994).
- [J92] (with H. C. Elman and G. Starke) *On the convergence of line iterative methods for cyclically reduced non-symmetrizable linear systems*, in NUMER. MATH. , 67:2, 177–190 (1994).
- [J93] (with Augustin A. Dubrulle), *A Multishift QR iteration without computation of the shifts*, NUMERICAL ALGORITHMS, 7, 173–181 (1994).
- [J94] (with Howard Elman), *Inexact and preconditioned Uzawa algorithms for saddle point problems*, SIAM J. NUMER. ANAL. 31 (1994), 1645–1661.
- [J95] (with Walter Gander and Rolf Strebler), *Fitting of Circles and Ellipses Least Squares Solution*, BIT 34, 558–578 (1994).
- [J96] (with Guanghan Xu, Hongyuan Zha, and Thomas Kailath), *Fast algorithms for updating signal subspaces*, IEEE TRANS. ON CIRCUITS AND SYSTEMS, 41, 537–549 (1994).
- [J97] (with Hongyuan Zha), *Perturbation analysis of the canonical correlations of matrix pairs*, LINEAR ALGEBRA APPL., 210, 3–28 (1994).
- [J98] (with Cheryl M. M. Carey and Kincho H. Law), *A Lanczos-based method for structural dynamic re-analysis problems*, INT’L JOUR. NUMER. METHODS IN ENGR., 37, 16, 2857–2883 (1994).

- [J99] (with Peter Arbenz), *Matrix shapes invariant under the symmetric QR algorithm*, NUMERICAL LINEAR ALGEBRA WITH APPLICATIONS 2:2,87–93 (1995).
- [J100] (with S.H. Lui), *Homotopy Method for the Numerical Solution of the Eigenvalue Problem of Self-Adjoint Partial Differential Equations*, NUMERICAL ALGORITHMS, 10, 363–378 (1995).
- [J101] (with Moody T. Chu and Robert E. Funderlic), *A Rank-One Reduction Formula and Its Application to Matrix Factorizations*, SIREV37, 512–530, (1995).
- [J102] (with Zhaojun Bai and Mark Fahey), *Some large-scale matrix computation problems*, JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, 74, 71–89,(1996).
- [J103] (with Sowmini Varadhan and Michael Berry), *Approximating Dominant Singular Triplets of Large Sparse Matrices via Modified Moments*, NUMER. ALGORITHMS, 13:1–2, 123–152, (1996).
- [J104] (with Zhaojun Bai), *Bounds for the trace of the inverse and the determinant of symmetric positive definite matrices*, ANNALS OF NUMERICAL MATHEMATICS, 4, 29–38, (1997).
- [J105] (with Urs von Matt), *Generalized Cross-Validation for Large Scale Problems*, JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS,6:1, 1–34,(1997).
- [J106] (with R. D. Fierro, P. C. Hansen, and D. P. O’Leary), *Regularization by truncated total least squares*, SIAM J. SCI. COMPUT. 18, 1223–1241, (1997).
- [J107] (with S. Chandrasekaran, M. Gu, A. H. Sayed) *Parameter estimation in the presence of bounded modeling errors*, IEEE SIGNAL PROCESSING LETTERS, 4, 195–197, (1997).
- [J108] (with Moody T. Chu and Robert E. Funderlic), *On a variational formulation of the generalized singular value decomposition*, SIAM J. MATRIX ANAL. APPL. , 18:4, 1082–1092 (1997).
- [J109] (with G. Meurant), *Matrices, moments and quadrature II; how to compute the norm of the error in iterative methods*, BIT 37:3, 687– 705 (1997).
- [J110] (with T. Zhang and K.H. Law), *On the Homotopy Method for Symmetric Modified Generalized Eigenvalue Problems*, SIAM J. SCI. COMPUT. 19 (1998), no. 5, 1625–1645.
- [J111] (with S. Chandrasekaran, M. Gu and A. H. Sayed), *Parameter Estimation in the Presence of Bounded Data Uncertainties*, SIAM J. MATRIX ANAL. APPL. 19, 235–252, (1998)
- [J112] (with T. Zhang, and K.H. Law), *Eigenvalue perturbation and generalized Krylov subspace method*, IMACS JOURNAL ON APPLIED NUMERICAL MATHEMATICS, 27 (1998) 185–202
- [J113] (with Andrew J. Wathen), *An Iteration for Indefinite Systems and Its Application to the Navier–Stokes Equations*, SIAM JOURNAL ON SCIENTIFIC COMPUTING, 19:2, 530–539, (1998)

- [J114] (with Lan Chieh Huang, Horst Simon and Wei-Pai Tang), *A Fast Poisson Solver for the Finite Difference Solution of the Incompressible Navier–Stokes Equations*, SIAM JOURNAL ON SCIENTIFIC COMPUTING, 19:5, 1606–1624, (1998)
- [J115] (with K. H. Law and T. Zhang), *On the Homotopy Method for Perturbed Symmetric Generalized Eigenvalue Problems*, SIAM JOURNAL ON SCIENTIFIC COMPUTING, 19:5, 1625–1645, (1998)
- [J116] (with Lars-Erik Andersson and Tommy Elfving), *Solution of Biharmonic Equations with Application to Radar Imaging*, J. of Comp. and Applied Mathematics (Elsevier), 94, 153-180 (1998)
- [J117] (with Eldar Giladi and Joseph B. Keller), *Inner and Outer Iterations for the Chebyshev Algorithm*, SIAM J. NUMER. ANAL. 35, 300–319, (1998)
- [J118] (with S. Chandrasekaran, M. Gu, and A. H. Sayed), *Parameter Estimation in the Presence of Bounded Data Uncertainties*, SIAM J. MATRIX ANAL. APPL. 19, 235–252, (1998).
- [J119] (with J. Baglama, D. Calvetti, and L. Reichel), *Adaptively preconditioned GMRES algorithms*, SIAM JOURNAL ON SCIENTIFIC COMPUTING, 20:1, 243–269 (1998)
- [J120] (with Tony F. Chan and Pep Mulet), *A Nonlinear Primal-Dual Method for Total Variation-Based Image Restoration*, SIAM JOURNAL ON SCIENTIFIC COMPUTING, 20:6, 1964–1977 (1999).
- [J121] (with D. Calvetti and L. Reichel), *A computable error bound for matrix functionals*, J. Comput. Appl. Math., 103, pp. 301-306, (1999).
- [J122] (with Moody Chu and Robert Funderlic), *Rank Modifications of Semi-Definite Matrices with Applications to Secant Updates*, SIAM J. MATRIX ANAL. APPL. 20, 428–436, (1999).
- [J123] (with T.Zhang and K.H. Law), *Subspace iterative methods for eigenvalue problems*, LINEAR ALG. AND ITS APPL. 294, 239–258, Elsevier, (1999)
- [J124] (with M. Benzi), *Bounds for the Entries of Matrix Functions with Applications to Preconditioning*, BIT 39:3, 417– 438 (1999).
- [J125] (with D. Calvetti and L. Reichel), *A Computable Error Bound for Matrix Functionals*, J. COMPUT. APPL. MATH. 103 , no. 2, 301–306 (1999).(Reviewer: Wasin So)
- [J126] (with D. Calvetti and L. Reichel) *Estimation of the L-Curve via Lanczos Bidiagonalization*, BIT 39:4, 603–619 (1999).
- [J127] (with P.C.Hansen and D.P. O’Leary), *Tikhonov Regularization and Total Least Squares*, SIAM J. MATRIX ANAL. APPL. 21, 185–194, (1999).
- [J128] (with S. Elhay, G.M.L. Gladwell, Y.M. Ram), *On some Eigenvector-eigenvalue Relations*, SIAM J. MATRIX ANAL. APPL. 20 (1999), no. 3, 563–574.
- [J129] (with S. Chandrasekaran, M. Gu, A.H. Sayed), *An Efficient Algorithm for a Bounded Errors-in-variables Model*, SIAM J. MATRIX ANAL. APPL. 20 (1999), no. 4, 839–859.

- [J130] (with Qiang Ye), *Inexact Preconditioned Conjugate Gradient Method with Inner-Outer Iteration*, SIAM J. SCI. COMPUT. 21 (1999/00), no. 4, 1305–1320.
- [J131] (with Peyman Milanfar and James Varah), *A Stable Numerical Method for Inverting Shape from Moments*, SIAM J. SCI. COMPUT. 21 (1999/00), no. 4, 1222–1243.
- [J132] \* (with D. Calvetti, W.B. Gragg and L. Reichel), *Computation of Gauss-Kronrod Quadrature Rules*, MATH. COMP. 69 (2000), no. 231, 1035–1052.
- [J133] (with Henk A. van der Vorst), *Numerical Progress in Eigenvalue Computation in the 20th Century*, J. COMPUT. APPL. MATH. 123, 35-65, (2000).
- [J134] (with Malcolm F. Murphy and Andrew J. Wathen), *A note on Preconditioning for Indefinite Linear Systems*, SIAM J. SCI. COMPUT. 21 (2000), no. 6, 1969–1972.
- [J135] (with Q. Ye), *Inexact Inverse Iteration for Generalized Eigenvalue Problems*, BIT 40, Issue 4 (December 2000), pp.671–684.
- [J136] (with Denis Vanderstraeten), *On the Preconditioning of Matrices with Skew-Symmetric component*, NUMERICAL ALGORITHMS 25:223-239, (2000).
- [J137] (with Z. Zhang and H. Zha), *Large Sparse Symmetric Eigenvalue problems with Homogeneous Linear Constraints: the Lanczos Process with Inner-outer Iterations*, LINEAR ALG. AND ITS APPL. 309, pp. 289-306, (2000).
- [J138] (with K. Solna, P. van Dooren), *Computing the SVD of a General Matrix Product/Quotient*, SIAM J. MATRIX ANAL. APPL. 22 1-19, (2001).
- [J139] (with Ahmed Sameh and Vivek Sarin), *A Parallel Balance Scheme for Banded Linear Systems* NUMERICAL LINEAR ALGEBRA WITH APPLICATIONS, no.5, 297-316, (2001).
- [J140] (with Nhat Nguyen, P.Milanfar), *A Computationally Efficient Superresolution Image Reconstruction Algorithm.*, IEEE TRANSACTIONS ON IMAGE PROCESSING, Vol. 10, No. 4, 573-583, (2001).
- [J141] (with N. Nguyen, P. Milanfar), *Efficient Generalized Cross-Validation with Application to Parametric Image restoration and Resolution Enhancement*, IEEE TRANSACTIONS ON IMAGE PROCESSING, Vol. 10, No. 9, pp. 1299-1308, (2001).
- [J142] (with H.Melboe), *A Stochastic Approach to Error Estimates for Iterative Linear Solvers, Part I*, BIT VOL. 41, NO.5, SUPPL., pp. 977-985, (2001).
- [J143] (with X. Wu and Jin-Yun Yuan), *SOR-Like Methods for Augmented Systems*, BIT, 41 (1), 71-85 (2001).
- [J144] (with T.Zhang), *Rank-One Approximation to Higher Order Tensors*, SIAM J. MATRIX ANAL. APPL. 23, 534-550, (2001).
- [J145] (with M. T. Chu), *Structured Inverse Eigenvalue Problems*, ACTA NUMERICA, 1-71 (2002)
- [J146] (with Paul Concus and Yong Sun), *Object-oriented Parallel Algorithms for Computing Three-dimensional Isopycnal Flow*, INTER. J. NUMER. METH. FLUIDS, 39: 585-605, (2002)

- [J147] (with C.Greif and J.M.Varah), *Block Orderings for Tensor-Product Grids in Two and Three Dimensions*, NUMERICAL ALGORITHMS, 30(2), 93–111, (2002)
- [J148] (with Jin-Yun Yuan), *Symmetric-Triangular Decomposition and Its Applications, Part I: Theorems and Algorithms*, BIT VOL. 42, No.4, pp. 814-822, (2002).
- [J149] (with S. Elhay and Y. M. Ram), *The Spectrum of A Modified Linear Pencil*, COMPUT. MATH. APPL. 46 (2003), no. 8-9, 1413–1426.
- [J150] (with Victor Pereyra), *Separable Nonlinear Least Squares: the Variable Projection Method and Its Applications*, INVERSE PROBLEMS 19(2), R1-R26, (2003).
- [J151] (with C. Greif), *On Solving Block-Structured Indefinite Linear Systems*, SIAM J. SCI. COMPUT., 24(6), 2076-2092 (2003)
- [J152] (with J. Orchard, C. Greif, B. Bjornson, M. S. Atkins), *Simultaneous Registration and Activation Detection for fMRI*, IEEE TRANSACTIONS ON MEDICAL IMAGING 22(11):1427-1435 (2003).
- [J153] (with M. Benzi and M. J. Gander), *Optimization of the Hermitian and Skew-Hermitian Splitting Iteration for Saddle-Point Problems*, BIT NUMERICAL MATHEMATICS 43 , 881-900 (2003).
- [J154] \* (with Zhong-Zhi Bai and Michael K. Ng), *Hermitian and Skew-Hermitian Splitting Methods for Non-Hermitian Positive Definite Linear Systems*, SIAM J. MATRIX ANAL. APPL. 24, 603–626 (2003).
- [J155] (with Orly Alter), *Integrative Analysis of Genome-Scale Data by using Pseudoinverse Projection Predicts Novel Correlation between DNA Replication and RNA Transcription*, in PROCEEDINGS OF NATIONAL ACADEMY OF SCIENCES, Vol. 101, No.47, p. 16577-16582, (2004).
- [J156] (with Michele Benzi), *A Preconditioner for Generalized Saddle Point Problems*, SIAM J. MATRIX ANAL. APPL. 26(1):20-41, (2004)
- [J157] (with Diana M. Sima and Sabine Van Huffel), *Regularized total least squares based on quadratic eigenvalue problem solvers*, BIT 44 (2004), 793–812.
- [J158] (with Michael Elad, Peyman Milanfar), *Shape from moments—an estimation theory perspective*, IEEE TRANS. SIGNAL PROCESS. 52 (2004), no. 7, 1814–1829.
- [J159] (with Zhong-Zhi Bai and Jian-Yu Pan), *Preconditioned Hermitian and skew-Hermitian splitting methods for non-Hermitian positive semidefinite linear systems*, NUMER. MATH. 98 (2004), no. 1, 1–32.
- [J160] (with Sepandar Kamvar and Taher Haveliwala), *Adaptive methods for the computation of PageRank*, LINEAR ALG. AND ITS APPL. 386 (2004), 51–65.
- [J161] (with J. Y. Yuan, R. J. Plemmons, and W. A. G. Ceclio), *Semi-conjugate direction methods for real positive definite systems*, BIT 44 (2004), no. 1, 189–207.
- [J162] (with Oren E. Livne), *Scaling by binormalization*, NUMER. ALGORITHMS 35 (2004), no. 1, 97–120.



- [J163] (with R. Vandebril, M. Barel, and N. Mastronardi), *A bibliography on Semiseparable Matrices*, CALCOLO 43, 249-270 (2005)
- [J164] (with G. Boutry, M. Elad, and P. Milanfar), *The Generalized Eigenvalue Problem for Nonsquare Pencils using a Minimal Perturbation Approach*, SIAM J. MATRIX ANAL. APPL. 27 (2005) 582–601.
- [J165] (with Y. Tsaig, M. Elad, P. Milanfar), *Variable Projection for Near-Optimal Filtering in Low Bit-Rate Block Coders*, IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY 15(1):154-160, (2005)
- [J166] (with U. B. Holz, K. H. Law), *A Subspace approximation Method for the Quadratic Eigenvalue Problem*, SIAM J. MATRIX ANAL. APPL. 26(2):498-521, (2005)
- [J167] (with Daniele Bertaccini, Stefano Serra Capizzano and Cristina Tablino Possio), *Preconditioned HSS Methods for the Solution of Non-Hermitian Positive Definite Linear Systems and Applications to the Discrete Convection-Diffusion Equation*, NUMER. MATH. 99(3), 441-484 (2005)
- [J168] (with Stefano Serra-Capizzano and Daniele Bertaccini), *How to deduce a proper eigenvalue cluster from a proper singular value cluster in the nonnormal case*, SIAM J. MATRIX ANAL. APPL. 27 (2005), no. 1, 82–86
- [J169] (with Chen Greif and James M. Varah), *An algebraic analysis of block diagonal preconditioner for saddle point systems*, SIAM J. MATRIX ANAL. APPL. 27 (2005), no. 3, 779–792
- [J170] (with Michele Benzi and Jrg Liesen), *Numerical solution of saddle point problems*, ACTA NUMER. 14 (2005), 1–137.
- [J171] (with Zhong-Zhi Bai, Lin-Zhang Lu, and Jun-Feng Yin), *Block triangular and skew-Hermitian splitting methods for positive-definite linear systems*, SIAM J. ON SCIENTIFIC AND STATISTICAL COMP.26 (2005), no. 3, 844–863.
- [J172] (with Annie Cuyt, Peyman Milanfar, and Brigitte Verdonk), *Multidimensional integral inversion, with applications in shape reconstruction*, SIAM J. ON SCIENTIFIC AND STATISTICAL COMP.27 (2005), no. 3, 1058–1070
- [J173] (with Orly Alter), *Reconstructing the Pathways of a Cellular System from Genome-Scale Signals by Using Matrix and Tensor Computations*, PROCEEDINGS OF NATIONAL ACADEMY OF SCIENCES, Vol. 102, No.49, p. 17559-17564, (2005).
- [J174] (with Li-Zhi Liao), *Continuous methods for extreme and interior eigenvalue problems*, LINEAR ALG. AND ITS APPL. 415 (2006), no. 1, 31–51.
- [J175] (with Mike A. Botchev), *A class of nonsymmetric preconditioners for saddle point problems*, SIAM J. MATRIX ANAL. APPL. 27 (2006), no. 4, 1125–1149

An asterisk denotes a paper reprinted in this volume.