

BIBΛΙΟΓΡΑΦΙΑ

- Akaike, H.: "Block Toeplitz matrix inversion", SIAM J. Appl. Math., Vol. 24, March 1973, pp. 234-241.
- Akaike, H.: "A new look at statistical model identification". IEEE - Trans. on Automat. Contr., Vol. AC-19, Dec. 1974, pp.716-723.
- Alexander, S.E.: "Adaptive Signal Processing", Springer Verlag, 1989
- Atal, B.S., Hanauer, S.L.: "Speech Analysis and Synthesis by linear prediction of the speech wave". J.A.S.A" 1971, pp. 637-655.
- Atal, B.S.: "Effectiveness of linear prediction characteristics of the speech wave for automatic speaker identification and verification". J.A.S.A., Vol. 55, No 6, June 1974, pp. 1304 -1312.
- Bakamides, S.G., Glaros, N.A. and Carayannis, G.: "A reduced complexity multipulse compression system", Speech Communication, Vol. 10, No 2, June 1991, pp. 171-178.
- Blackman, R.B. and Tukey, J.W.: "The Measurement of Power Spectra from the Point of View of Communications Engineering". New York, Dover, 1959.
- Bo11, S.F.: Improving Linear Prediction Analysis of Noisy Speech by predictive Noise Cancellation. Proceedings of 1977-ICASSP, Hartford U.S.A., May 1977, pp. 10-12.
- Box, G.E.P. and Jenkins, G.M.: "Time Series Analysis: Forecasting and Control". San Francisco, CA: Holden-Day, 1970.
- Burg, J.P.: "Maximum Entropy Spectral Analysis". Ph. D. dissertation, Stanford University, 1975.
- Cadzow, J.A.: "High performance spectral estimation -A new ARMA method", IEEE Trans. on ASSP, Vol. ASSP -28, pp. 524-529, Oct. 1980.
- Cadzow, J.A.: "High performance spectral estimation -A new ARMA"
- Cadzow, J.A.: "SVD representation of unitary matrices", IEEE Trans. on ASSP, Vol. ASSP-32, No 3, pp. 512-516, June 1984.
- Capon, J.: "High-resolution frequency-wavenumber spectrum analysis": Proc. IEEE, Vol. 57, pp. 1048-1418, Aug. 1969.
- Carayannis, G., Gueguen, C., Farjaudon, T., Le Chevalier, F.: "Unvocoder a canaux adaptes". L'Onde Electrique, 1975, Vol. 55, No 7, pp. 369-372.
- Carayannis, G., Gueguen, C.: "The factorial Linear Modelling. A Karhunen-Loeve Approach to speech Analysis". Proceeding of the IEEE International, Conference on Acoustics, Speech and Signal processing, Philadelphia 1976, pp. 489-492.
- Carayannis, G.: "Analyse du signal par decomposition triangulaire et diagonalisation des matrices de covariance". L'Onde Electrique 1977, Vol. 57, No 8-9, pp. 525-531.

- Carayannis, G.: "An Alternative Formulation for the recursive solution of Covariance and Autocorrelation Equations". IEEE - Transactions on ASSP. Vo. 25, No 6, December 1977, pp. 574 -577.
- Carayannis, G., Kalouptsidis, N: and Manolakis, D.: "Classes of matrices leading to fast algorithms for signal processing", in Proc. 14th Annu. Conf. Inform. Sci. Syst. Mar. 26-28, 1980, Princeton, NJ.
- Carayannis, G., Kalouptsidis N. and Manolakis D.: "Fast recursive algorithms for a class of linear equations", IEEE Trans. Acoust. Speech, Signal Process, Vol. ASSP-30, No 2, April 1982, pp. 227-239.
- Carayannis, G., Manolakis, D. and Kalouptsidis, N.: "A fast sequential algorithm for least-squares filtering and prediction", IEEE Trans. Acoustics, Speech Signal Process., Vol. ASSP-31, No 6, December 1983, pp.1394-1402.
- Carayannis, G., Soufli, R.: "Efficient Signal Modeling for Linear Prediction", Proc. EUSIPCO '92, Brussels, Belgium, August 1992.
- Carayannis, G., Koukoutsis, E. and Halkias, C.C.: "Hardware implementation of partitioned-parallel algorithms in linear prediction", Signal Processing, Vol. 24, No 3, September 1991, pp. 253-269.
- Cioffi, J. and Kailath, T.: "Fast, recursive least-squares, transversal filters for adaptive processing", IEEE Trans. Acoust., Speech Signal Process., Vol. ASSP-34, April 1984, pp. 304-337.
- Cooley, J.W. and Tukey, J.W.: "An algorithm for machine calculation of complex Fourier series", Math. Comput., Vol. 19, pp. 297-301, Apr. 1965.
- Delsarte, P. and Genin, Y.: "The Split Levinson algorithm", IEEE Trans. on ASSP, Vol. ASSP-34, June 1986.
- Dendrinou, M., Bakamidis, S., Carayannis, G.: "Speech enhancement from noise: A regenerative approach", Speech Communication Vol. 10, No 1, February 1991, pp.45-57.
- Dologlou, I., Carayannis, G.: "Pitch Detection based on zero-phase filtering", Speech Communication, Vol. 8, No 4, December 1989, pp. 309-318.
- Dologlou, I., Carayannis, G.: "LPC/SVD analysis of signals with zero modeling error", Signal Processing, Vol. 23, No 3, June 1991.
- Duda, R.O., Hart, P.E.: Pattern classification and Scene Analysis: Wiley-interscience Publication. John Wiley & Sons, N.Y., London, Sydney, Toronto 1973.
- Durbin, J.: "The fitting of time series models", Rev. Inst. Int. de Stat., Vol. 28, pp. 233-244, 1960.
- Faddeeva, V.N.: Computational Methods of Linear Algebra. New York, Dover, 1959.

- Falconer, D.D. and Ljung, L.: "Application of fast-Kalman estimation to adaptive equalization", *IEEE Trans. Commun.*, Vol. COM-26, No 110, October 1978, pp. 1439-1446.
- Fent G.: *Acoustic theory of speech production*, Mouton, La Haye, Paris 1970.
- Flanagan, J.: Speech Analysis Synthesis and Perception (Second Edition). Springer Verlag, Berlin, Heidelberg, New York, 1972.
- Flanagan, J.: "Focal Points in Speech Communication Research", IEEE transactions on Communication Technology, Vol. Com-19, No 6, December 1971.
- Friedlander, B.: "Lattice filters for adaptive processing", *Proc. IEEE*, Vol. 70, No 8, August 1982, pp. 829-867.
- Fukunaga, K.: Introduction to Statistical Pattern Recognition. Academic Press, 1972.
- Gantmacher, F.: *The Theory of Matrices*, Chelsea, New York, 1960.
- Golub, G.H. and Loan, V.: "Matrix Computations". Baltimore, MD: John Hopkins University Press, 1983.
- Gray, A.H., Markel, J.D.: Digital Lattice and Ladder Filter Synthesis. IEEE-Trans. on Audio and Electroacoustics, Vol. AU 21, No 6, December 1973, pp. 491-500.
- Gray, A.H., Markel, J.O.: A Spectral-Flatness Measure for Studying the Autocorrelation Method of Linear Prediction of Speech Analysis. IEEE-Trans. on ASSP, Vol. 22, No 3, June 1974, pp. 207-212.
- Gray, M.H., Markel, J.O.: Distance Measures for Speech Processing. *IEEE-trans. on ASSP*, Vol. 24, No 5, October 1976, pp. 380- 391.
- Hayes, M.H. and Clements, M.A.: "An efficient algorithm for computing Pisarenko's Harmonic Decomposition using Levinson's recursion", *IEEE Trans. on ASSP*; Vol. ASSP-34, No 3, pp.485-491, June 1986.
- Haykin, S.: "Adaptive Filter Theory", Prentice Hall, Englewood Cliffs, NJ, 1986.
- Honig, M.I., Messerschmitt, D.G.: "Adaptive Filters", Kluwer Academic Publishers, 1984.
- Itakura, F., Saito, S.: On the optimum quantization of feature parameters in the Parcor speech synthesizer. IEEE-Conf. Record 1972 Conf. Speech Communication and Processing. April 1972, pp. 434-437.
- Itakura, F.: Minimum Prediction Residual Applied to Speech Recognition. IEEE-Trans. on ASSP, Vol. 23, No 1, February 1975, pp. 67-72.
- Kailath, T.: *Linear Systems*, Prentice-Hall, Englewood Cliffs, NJ. 1980.
- Kalouptsidis, N., Carayannis, G. and Manolakis D.: "A fast covariance type algorithm for sequential least-squares filtering and prediction", *IEEE Trans. Automatic Control*, Vol. AC-29, No 8, August 1984, pp. 752-755.

- Kalouptsidis, N., Carayannis, G. and Manolakis, D.: "Efficient recursive-in-order least squares FIR filtering and prediction", *IEEE trans. Acoustics, Speech Signal Process*, Vol. ASSP-33, No 5, October 1985, pp. 1175-1187.
- Kay, S.M. and Marple, S.L.: "Spectrum analysis -A modern perspective", *Proc. of the IEEE*, Vol. 69, pp. 1380-1419, Nov. 1981.
- Kopec, G.E., Oppenheim, A.V., Tribolet, J.M.: *Speech Analysis by Homomorphic Prediction. IEEE-trans. on ASSP*, Vol. 25, No 1, February 1977, pp. 40-49.
- Koukoutsis, E., Carayannis, G. and Halkias, C.C.: "Supperlattice/ Superladder Computational Organisation for linear prediction and optimal FIR filtering", *IEEE Trans. SP*, Vol. 39. No 10, October 1991, pp. 2199-2215.
- Kumaresan, R. and Tufts, o.: "Estimating the parameters of exponentially damped sinusoids and pole-zero modeling in noise", *IEEE Trans. on ASSP*, Vol. ASSP-30, No 6, pp. 833-840, Dec.1982.
- Kumaresan, R.: "On the zeros of the linear prediction error filters for deterministic signals", *IEEE Trans. on ASSP*, Vol..ASSP-31, No 1, pp. 217-220, Feb. 1983.
- Kyrkos, A. Giakoymakis, E.A., Carayannis, G.: "QRS Detection through time recursive prediction techniques", *Signal Processing*, Vol. 15, No 8, December 1988, pp. 429-436.
- Le Roux, J., Gueguen, C.J.: A Fixed point Computation of Partial Correlation Coefficients, *IEEE-Trans. on ASSP*, Vol. 25, No 3, June 1977, pp. 257-259.
- Lee, D., Morf, M. and Friedlander, B.: "Recursive squareroot ladder estimation algorithms", *IEEE Trans. 'Acoust. Speech Signal Process*, Vol. ASSP-29, No 3, June 1981, pp. 627-641.
- Levinson, N.: "The Wiener (root mean square) error criterion in filter design and prediction", *J. Math. Phys.*, Vol. 25, pp.261-278, 1947.
- Makhoul, J.: Spectral linear Prediction: Properties and Applications. *IEEE-Trans. on ASSP.*, Vol. 23, No 3, June 1975, pp.283-296.
- Makhoul, J.: Linear Prediction: A Tutorial Review. *Proceedings of the IEEE*, Vol. 63, No 4, 1975.
- Maksym, J.N.: Real time pitch period extraction by adaptive prediction of the speech waveform. *Proceedings of IEEE - 1972 Conference on Speech Communication and Processing*, Boston U.S.A., 1972, pp. 70-73.
- Manolakis, D., Carayannis, G. and Kalouptsidis, N.: "Fast inversion of vector generated matrices for signal processing", in *Signal Processing: Theories and Applications*, M. Kunt and F. de Coulon, Eds. Amsterdam, the Netherlands: North- Holland, 1980, pp. 525-532.

- Manolakis, D., Kalouptsidis, N. and Carayannis, G.: "Fast algorithms for discrete-time Wiener filters with optimum lag", IEEE Trans. Acoust. Speech Signal Process., Vol. ASSP-21, February 1983, pp. 168-179.
- Markel, J.D., Gray, A.H., Jr.: "Linear Prediction of Speech". Springer-Verlag Berlin, Heidelberg, New York 1976.
- Marple, S.L.: "Spectral line analysis by Pisarenko and Prony methods", Proc. IEEE ICASSP-79, Washington, DC, 1980, pp.159-161.
- Marple, S.L.: "A new autoregressive spectral analysis algorithm", IEEE Trans on ASSP, Vol. ASSP-28, pp. 441-454, Aug. 1980.
- Marple, I.: "Efficient least-squares FIR system identifications", IEEE Trans. Acoust. Speech Signal Process., Vol. ASSP-29, No 1, February 1981, pp. 62-73.
- Mendel, J.: Discrete Techniques of Parameter Estimation, Dekker, New York, 1973.
- Morf, M., Dickinson, B., Kailath, T., Vieira, A.: Efficient Solution of Covariance Equations for Linear Prediction. IEEE-Trans. on ASSP., Vol. 25, No 5, October 1977, pp. 423-433.
- Noll, M.: Cepstrum Pitch Determination. Journal of the Acoustical Society of America. Vol. 41, 1967, pp. 293-309.
- Nuttall, A.H.: "Spectral Analysis of a univariate process with bad data points and linear predictive techniques", in Naval Underwater System Center (NUSC) scientific and engineering studies, Spectral Estimation, NUSC, New London, CT, Mar.1976.
- Oppenheim, A.V., Kopec, G.E., Tribolet, J.M.: Signal Analysis by Homomorphic Prediction. IEEE-Trans. on ASSP, Vol. 24, No 4, August 1976, pp. 327-332.
- Oppenheim, A.V., Schafer, R.W.: Digital Signal Processing. Prentice -Hall, Englewood Cliffs, N.J., 1989.
- Orfanidis, S.J.: "Optimum Signal Processing", 2nd Ed. McGraw-Hill, Inc.,1988.
- Ortigueira, M.D. and Tribolet, J.M.: "A modified Burg's algorithm for AR spectral estimation", Vigo Workshop on Signal Processing and its Applications, Proc., Lisboa, Portugal, July 1981.
- Papoulis, A.: "Probability, Random Variables, and Stochastic Processes". McGraw Hill, Kogakusha Ltd. International Student Edition, 1965.
- Pavlidis, T.: "Structural Pattern Recognition". Springer-Verlag, Berlin, Heidelberg, New York, 1977.
- Pisarenko, V.F.: "The retrieval of harmonics from a covariance function", Geophys. J. Roy. Astr. Soc., vol. 33, pp. 347-366, 1973.
- Porat, B., Friedlander, B. and Morf, M.: "Square-root covariance ladder algorithms", IEEE Trans. Automatic Control, Vol. AC -27, No 4, August 1982, pp. 813-829.

- Proakis, J.G.: Digital Communications, McGraw-Hill, New York, 1983.
- Prony, G.R.B.: "Essai experimental et analytique, etc.", Paris, J. de L'ecole Polytechnique, Vol. 1, cahier 2, pp. 24-76, 1975.
- Rabiner, L., Schafer, R., Rader, C.: The Chirp Z transform Algorithm and its Application. Bell System Technical Journal, June 1969.
- Rabiner, L.R., Atal, B.S., Sambur, M.R.: LPC Prediction Error -Analysis of its Variation with the Position of the Analysis Frame. IEEE-Trans. on ASSP, Vol. 25, No 5, October 1977, pp. 434-441.
- Rabiner, L.R., Sambur, M.R.: Application of an LPC Distance Measure to the Voiced-Unvoiced-Silence Detection Problem. IEEE- Trans. on ASSP, Vol. 25, No 4, Aug. 1977. pp. 338-343.
- Rabiner, L.R., Schafer, R.W.: "Digital Processing of Speech Signals", Prentice Hall Inc., Englewood Cliffs, N.J. 1978.
- Sambur, M.R.: Selection of Acoustic Features for Speaker Identification. IEEE~Trans. on ASSP, Vol.. 23, No 2, April 1975, pp. 176-182.
- Sambur, M.: "Adaptive noise canceling for speech signals", IEEE Trans. on ASSP, Vol. ASSP-26, No 5, pp. 419-423, Oct. 1978.
- Schuster, A.: "On the investigation of hidden periodicities with applications to a supposed 26 day period of meteorological phenomena", Terrestrial Magnetism, Vol. 3, pp. 13-41, Mar. 1898.
- Stainhaouer, G.N. and Carayannis, G.: "Character generation and scaling through fast transform techniques", Signal Processing, Vol. 23, No 1, April 1991, pp. 1-14.
- Szego, G.: "Orthogonal Polynomials", New York: American Mathematical Society, 1959.
- Touratzidis, I., Dologlou, I. and Carayannis, G.: "The eigen problem formulation for HMM", Speech Communication, Vol. 10, No 4, November 1991.
- Tufts, D.W. and Kumaresan, R.: "Estimation of frequencies of multiple sinusoids: Making linear prediction perform like maximum likelihood", Proc. IEEE, Vol. 70, No 9, pp. 975-989, Sept. 1982.
- Ulrych, T.J. and Clayton, R.W.: Time series modeling and maximum entropy", Phys. Earth Planet. Interiors, Vol. 12, pp. 188-200, Aug. 1976.
- Welch, P.D: "The use of Fast Fourier Transforms for the estimations of power spectra: A method based on time averaging over short, modified periodograms", IEEE Trans. Audio Electroacoust., Vol.. AU-15, pp. 70-73, June 1967.
- Willsky, A.: Digital Signal Processing and Control and Estimation Theory. Cambridge, MA: MI-T, 1979.