## Bibliography

- Agarwal R.P., Difference Equations and Inequalities, Marcel Dekker, New York, Basel, Hongkong, 1992.
- B. Sasu, A.L.Sasu, Stability and Stabilizability for Linear Systems of Difference Equations, Journal of Difference Equations and Applications, Vol. 10, pp. 1085-1105 (2004).
- [3] A.L.Sasu, Stabilizability and Controllability for Systems of Difference Equations, J. of Difference Equations and Applications, Vol. 12, No. 8, pp. 821-826 (2006).
- [4] C. Cuevas, M. Pinto, Asymptotic Behavior in Volterra Difference Systems with Unbounded Delay, J. of Computatinal and Applied Mathematics, 113, pp. 217-225 (2000).
- [5] Czornik A., On the Generalized Spectral Subradius, Linear Algebra and its Applications. 407, pp. 242-248 (2005).
- [6] Czornik A., Some Properties of the Spectral Radius of a Set of Matrices, Int.J. Appl.Math.Comput. Sci., Vol. 16, No. 2, pp. 183-188 (2006).
- [7] Elaydi S., Periodicity and Stability of Linear Volterra Difference Systems, J.
  Math. Analy. Appl. 181, pp. 483-492 (1994).

- [8] Elaydi S., An Introduction to Difference Equations, Springer-Verlag New York, 1996.
- [9] Elaydi S., Murakami S., Uniform Asymptotic Stability in Linear Volterra Difference Equations, J. Differ.Equations Appl., vol. 3, pp. 203-218 (1998).
- [10] E. Kaslik, E. Balint, A.M. Birauas, and St. Balint., Approximation of the Domain of Attraction of an Asymptotically Stable Fixed Point of a First Order Analytical System of Difference Equations, Nonlinear Studies, 10(2): pp. 1-12, 2003.
- [11] Gaishun, I. V., Dymkov, M. P., Controllability of Systems Described by Linear Discrete Volterra Equations, (Russian) Avtomat. i Telemekh., no. 7, pp. 88–100 (2000); translation in Autom. Remote Control 61, no. 7, part 2, pp. 1143–1154 (2000).
- [12] F. Callier, C. Desoer., Linear System Theory, Narosa Publishing House, 1992.
- [13] J. Morchalo, Asymptotic Equivalence of Volterra Difference Equations, Publications Mathematiques, Vol. 39, pp.301-312 (1995).
- [14] J.M.Ortega, Stability of Difference Equations and Convergence of Iterative Processes, SIAM J. Numer. Anal., 10, no. 2, pp. 268-282 (1973).
- [15] J.P.LaSalle, The Stability of Dynamical Systems, Regional Conference Series in Applied Mathematics, Society for Industrial and Applied Mathematics, Pennsylvania, 1976.
- [16] K. Ogata, Discrete-Time Control Systems, Second Edition, Pearson Education, Inc., 1995.
- [17] Kailath, T., Linear Systems, Englewood Cliffs, N.J.: Prentice Hall, Inc., 1980.

- [18] Kalman,R.E., On the General Theory of Control Systems, Proc. First intern. Cong. IFAC, Moscow, 1960. Automatic and Remote Control. London: Butterworth and Co.,Ltd., pp. 481-92 (1961).
- [19] Kalman, R.E., Mathematical Description of Linear Dynamical Systems, J.SIAM control, pp. 152-192 (1963).
- [20] Kalman, R.E., Y. C. Ho, and K.S. Narendra, Controllability of Linear Dynamical Systems, Contributions to Differential Equations, 1, pp. 189-213 (1963).
- [21] Klamka J., Controllability of Dynamical Systems- A Survey, Arch. Contr. Sci., Vol. 2, No. 3, pp. 281-307(1993).
- [22] Klamka,J., Constrained controllability of discrete 2-D linear systems, Proc. IMACS Int. Symp. Signal Processing, Robotics and Neural Networks, Lille, France, pp. 166-169 (1994).
- [23] Klamka, J., Constrained controllability of nonlinear systems, IMA J. Math. Contr. Inf., Vol. 12, No. 2, pp. 245-252 (1995).
- [24] Klamka,J., Controllability of Second-Order Semilinear Infinite Dimensional Dynamical Systems, Applied Mathematics and Computer Science, Vol.8, pp.459-470 (1998).
- [25] Klamka, J., Schauder's fixed-point theorem in nonlinear controllability problems, Control and Cybernetics, Vol. 29, pp. 153-165 (2000).
- [26] Klamka J., Controllability of Nonlinear Discrete Systems, Int.
  J.Appl.Math.Comput.Sci., Vol. 12, No. 2, pp. 173-180 (2000).
- [27] L. Chen and K. Narendra, Identification and Control of a Nonlinear Discrete-Time System Based on its Linearization : A Unified Framework, IEEE Transactions on Neural Networks, Vol. 15, No. 3, May (2004).

- [28] L.J. Corwin and R.H. Szczarba, Multivariable Caculus New York : Marcel Dekker, 1982.
- [29] Limaye, B.V., Functional Analysis Wiley Eastern Limited, New Delhi, 1980.
- [30] Mohan C. Joshi, Ramendra K. Bose Some Topics in Nonlinear Functional Analysis, Wiley Eastern Limited, 1985.
- [31] M. Pinto., Discrete Dichotomies, Computers Math. Applic. Vol. 28, No. 1-3, pp. 259-270 (1994).
- [32] M. Pinto, Null Solutions of Difference Systems under Vanishing Perturbation,J. of difference equations and Applications, Vol. 9(1), pp. 1-13 (2003).
- [33] M.N.Islam and Y.N.Raffoul, Exponential Stability in Non-linear Difference Equations, J. of difference equations and Applications, Vol. 9, No.9, pp. 819-825 (2003).
- [34] M.R.Crisci, V.B.Kolmanovski and A. Vecchio, Boundedness of discrete Volterra equations, J. Math. Anal. Appl., 211, pp. 106-130 (1997).
- [35] Naulin R., Vanegas C.J., Instability of discrete systems, Electronic J. of differential equations, Vol. 1998, No. 33, pp. 1-11 (1998).
- [36] P.Eloe, M.Islam, Y. Raffoul, Uniform asymptotic stability in nonlinear Volterra discrete systems, Comput. Math. Appl. 45, pp. 1033-1039 (2003).
- [37] R.K.George, T.P.Shah, Asymptotic Stability of Nonlinear Discrete Dynamical Systems Involving (sp) matrix, (to appear in Nonlinear Studies).
- [38] Raju K. George, Trupti P.Shah, Steering Control of Semi-linear Discrete Dynamical System, Journal of the Indian Institute of Science, vol. 87, No. 4, pp.485-489 (2007).

- [39] Raju K. George, Trupti P.Shah, Accurate solution estimate and Asymptotic behavior of Nonlinear Discrete System, (to be communicated)
- [40] Raju K.George, Trupti P.Shah, Controllability of Discrete Volterra Systems, (to be communicated).
- [41] Raju K.George, Trupti P.Shah, Asymptotic Equivalence of Discrete Volterra Systems, (to be communicated).
- [42] Raju K.George, Trupti P.Shah, Optimal Control of Discrete Volterra System -A Classical approach, (to be communicated)
- [43] R. Medina, M. Gil., Accurate Solution Estimates for Nonlinear Nonautonomous Vector Difference Equations, Abstract and Applied Analysis 2004:7, pp. 603-611 (2004).
- [44] R. Medina, The Asymptotic Behaviour of the Solutions of a Volterra Difference Equations, Comput. Math. Appl., 181, pp. 19-26 (1994).
- [45] R. Medina, Asymptotic Behaviour of Volterra Difference Equations, Comput. Math. Appl., 41, pp. 679-687 (2001).
- [46] R. Medina, Accurate Solution Estimates for Vector Difference Equations, IJMMS 2003:48, pp. 3059-3066 (2003).
- [47] R. Rabah, J.Karrakchou, Exact Controllability and Complete Stabilizability for Linear Systems in Hilbert Spaces, Appl. Math. Lett. Vol. 10, No. 1, pp. 35-40 (1997).
- [48] S.A.Belbas, W.H.Schmidt, Optimal Control of Volterra equations with impulses, Applied Mathematics and Computation 166, pp. 696-723(2005).

- [49] S.A.Belbas, A new method for optimal control of Volterra integral equations.Applied Mathematics and Computation 189, pp. 1902-1915 (2007).
- [50] S.P.Gordon, On converses to the stability theorems for dierence equations, SIAM J. Control 10, pp. 76-81 (1972).
- [51] Song, Y. and Baker, C.T.H., Perturbation theory for discrete Volterra equations,J. of Difference Equations and Applications, 10, pp. 969-987 (2003).
- [52] Song, Y. and Baker, C.T.H., Perturbation of Volterra difference equations, J. of Difference Equations and Applications, 4, pp. 379-397(2004).
- [53] S.K.Choi, N.J.Koo, Asymptotic Property of Linear Volterra Difference Systems,
  J. Math. Anal.Appl. 321, pp. 260-272 (2006).
- [54] V. Lakshmikantham, D. Trigiante, Theory of Difference Equations : Numerical Methods and Applications, Academic Press, Boston et cet, 1988.
- [55] V. Kolmanovskii, L. Shaikhet, Some Conditions for Boundedness of Solutions of Difference Volterra Equations, Applied Mathematics Letters 16, pp. 857-862 (2003).
- [56] V.B.Kolmanovskii, E. Castellanos-Velasco, J.A. Torress-Munoz, A Survey : Stability and Boundedness of Volterra Difference Equations, Nonlinear Analysis, 53, pp. 861-928 (2003).
- [57] Vu Ngoc Phat, Jong Yeoul Park, Il Hyo Jung Stability and Constrained Controllability of Linear Control Systems in Banach Spaces J. Korean Math. Soc. 37, No. 4, pp. 593-611 (2000).
- [58] W.Krabs, On Local Controllability of Time Discrete Dynamical Systems into Stedy States, J. of Difference equations and Applications, Vol. 8(1), pp.1-11 (2002).

- [59] W. Krabs., Stability and Controllability in Non-autonomous Time-discrete Dynamical Systems, J. of Difference equations and Applications, Vol. 8(12), pp. 1107-1118 (2002).
- [60] W. Krabs., On Local Fixed Point Controllability of Nonlinear Difference Equations, Journal of Difference equations and Applications, Vol. 9, pp. 827-832 (2003).
- [61] W. Krabs., On Local Reachability and Controllability of Nonlinear Difference Equations, Journal of Difference equations and Applications, Vol. 12, pp. 487-494 (2006).
- [62] W.G.Kelley and A.C.Peterson., Difference equations, Academic Press, 2001.
- [63] X. Xue and L. Guo., A Kind of Nonnegative Matrices and its Application on the Stability of Discrete Dynamical Systems, J. Math. Anal. Appl., Vol. 331, Issue 2, pp. 1113-1121 (2007).
- [64] Y. Raffoul and Y.M.Dib, Boundedness and Stability in Nonlinear Discrete Systems with Nonlinear Perturbation, J. of Difference Equations and Applications, Vol. 9, No. 9, pp. 853-862 (2003).