

Literatura

Knihy a texty české a slovenské

- [1] Havlena V., Štecha J.: Moderní teorie řízení. Skriptum ČVUT FEL Praha, 1996.
- [2] Holodniok M., Klíč A., Kubíček M., Marek M.: Metody analýzy nelineárních dynamických modelů. Academia, Praha, 1986.
- [3] Horáček P., Fuka J.: Systémy a modely. Skripta FEL ČVUT, Praha, 1996.
- [4] Horák J., Krlín L.: Deterministický chaos a matematické modely turbulence. Academia, Praha, 1996.
- [5] John J.: Systémy a řízení. Skripta FEL ČVUT, Praha, 1996.
- [6] Kolektív: Oborové encyklopédie. Aplikovaná matematika I. II., SNTL, Praha, 1978.
- [7] Kotek Z., Kubík S., Razím M.: Nelineární dynamické systémy. SNTL, Praha, 1973.
- [8] Kotek Z., Razím M.: Teorie nelineárních, optimálních a adaptivních řídících systémů. Skripta FEL ČVUT, Praha, 1982.
- [9] Kubík S., Kotek Z., Strejc V., Štecha J.: Teorie automatického řízení I. Lineární a nelineární systémy. SNTL, Praha, 1982.
- [10] Kubík S., Kotek Z., Razím M., Hrušák J., Branžovský J.: Teorie automatického řízení II. Optimální, adaptivní a učící se systémy. SNTL, Praha, 1982.
- [11] Marek M., Schreiber I.: Stochastické chování deterministických systémů. Academia, Praha, 1984.
- [12] Medved M.: Dynamické systémy. Veda, Bratislava, 1988.
- [13] Nagy J.: Vybrané partie z moderní matematiky. SNTL, Praha, 1976.
- [14] Nagy J.: Stabilita řešení obyčejných diferenciálních rovnic. SNTL, Praha, 1980.
- [15] Štecha J., Havlena V.: Teorie dynamických systémů. Skriptum ČVUT FEL Praha, 1996.
- [16] Satoriová K.: Použití alternativních modelů při identifikaci ekonomických systémů. Diplomová práce, ČVUT FEL Praha, 1996.

Knihy a sborníky jiné

- [17] Andronov A.A., Chajkin C.E.: Těoriya kolebanij. Fizmatgiz, Moskva, 1959.
- [18] Arnold V.I.: Ordinary Differential Equations. M.I.T. Press, Cambridge, MA, 1973.
- [19] Arnold V.I.: Geometrical Methods in the Theory of Ordinary Differential Equations. Springer Verlag, New York, 1980.
- [20] Åstrom K.: Introduction to Stochastic Control Theory. Academic Press, N.York, 1970.

- [21] Atherton D.P.: Nonlinear Control Engineering. Van Nostrand Reinhold, London, 1975.
- [22] Byrnes C.I., Lindquist A. (Eds): Theory and Application of Nonlinear Control Systems. North-Holland, Dordrecht, 1986.
- [23] Byrnes Ch.I., Kurzhanski A.(Eds.): Modelling and Adaptive Control. Springer Verlag, Berlin, 1988.
- [24] Chua L.O.: Introduction to Nonlinear Network Theory. McGrawHill, New York, 1969.
- [25] Desoer C.A., Vidyasagar M.: Feedback Systems: Input-Output Properties. Academic Press, New York, 1975.
- [26] Gantmacher F.R.: Theory of Matrices. Chelsea Publishing Co., New York, 1959.
- [27] Gelb A., Vander Velde W.E.: Multiple-Input Describing Functions and Nonlinear System Design. McGraw-Hill, 1968.
- [28] Gibson J.E.: Nonlinear Automatic Control. McGraw-Hill, New York, 1963.
- [29] Gilmore R.: Catastrophe Theory for Scientists and Engineers. John Wiley, New York, 1981.
- [30] Goodwin G.C., Sin K.S.: Adaptive Filtering Prediction and Control. Prentice Hall, Englewood Cliffs, 1984.
- [31] Göldner K., Kubík S.: Nichtlineare Systeme der Regelungstechnik. VEB Verlag Technik, Berlin, 1978.
- [32] Hahn W.: Theory and Application of Liapunov's Direct Method. Prentice-Hall, Englewood Cliffs, N.J, 1963.
- [33] Guckenheimer J., Holmes P.: Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields. Springer, N.Y., 1983.
- [34] Haken H.: Synergetics. An Introduction. Springer-Verlag, Berlin, 1978.
- [35] Hsu J.C., Meyer A.U. Modern Control Principles and Applications. McGraw-Hill, New York, 1968.
- [36] Isidori A.: Nonlinear Control Systems. 3.vyd., Springer Verlag, New York, 1995.
- [37] Jazwinski A.H.: Stochastic Processes and Filtering Theory. Academic Press, N.York, 1970.
- [38] Jetschke G.: Mathematik der Selbstorganisation. VEB Verlag, Berlin, 1989.
- [39] Khalil H.: Nonlinear Systems. 2.vyd. Upper Sadle River, NJ, Prentice-Hall, 1996.
- [40] Kulhavý R.: Recursive Nonlinear Estimation, A Geometric Approach. Springer-Verlag, Berlin, 1996.
- [41] La Salle J., Lefschetz S.: Stability by Lyapunov's Direct Method. Academic Press, 1961.
- [42] Lefschetz S.: Stability of Nonlinear Control Systems. Academic Press, 1962.
- [43] Leven R.W., Koch B.P., Pompe B.: Chaos in dissipativen Systemen. Akademie-Verlag, Berlin, 1989.

- [44] Levine W.S. (Ed.): The Control Handbook. CRC Press, USA, 1996.
- [45] Lewis F.L.: Optimal Estimation. J.Wiley, New York, 1986.
- [46] Marek M., Schreiber I.: Chaotic Behavior of Deterministic Dissipative Systems. Academia, Praha, 1991.
- [47] Michel A.N., Miller R.K.: Qualitative Analysis of Large Scale Dynamical Systems. Academic Press, New York, 1977.
- [48] Narendra K.S., Taylor J.H.: Frequency Domain Criteria for Absolute Stability. New York, Academic Press, 1973.
- [49] Nijmeijer H., Van der Schaft A.J.: Nonlinear Dynamical Control Systems. Springer Verlag, 1990.
- [50] Papoulis A.: Probability, Random Variables and Stochastic Processes. McGraw Hill, New York, 1965.
- [51] Pindyck R.S., Rubinfeld D.L.: Econometric Models and Economic Forecasts. McGraw-Hill, New York, 1990.
- [52] Slotine J.E., Li W.: Applied Nonlinear Control. Prentice-Hall, New Jersey, 1991.
- [53] Vidyasagar M.: Input-Output Analysis of Large-Scale Interconnected Systems. Springer Verlag, New York, 1981.
- [54] Vidyasagar M.: Control System Synthesis: A Factorization Approach. M.I.T. Press, Cambridge, MA., 1985.
- [55] Vidyasagar M.: Nonlinear System Analysis. Second Edition. Englewood Cliffs, NJ, Prentice-Hall, 1993.
- [56] Vaněček A., Čelikovský S.: Control Systems. From Linear Analysis to Synthesis of Chaos. Prentice Hall, London, 1996.
- [57] Willems J.L.: Stability Theory of Dynamical Systems. Nelson, London, 1970.

Články

- [58] Anderson B.D.O.: Stability of control systems with multiple nonlinearities. *J.Franklin Inst.*, 282, s.155-160, 1966.
- [59] Brockett R.W., Willems J.W.: Frequency domain stability criteria, *IEEE Trans.on Automatic Control*, část I. AC-10, č.3, s.255-261, 1965; část II. AC-10, č.4, s.407-413, 1965.
- [60] Byrnes C.I., Isidori A, Willems J.C.: Passivity, feedback equivalence and the global stabilization of minimum phase nonlinear systems. *IEEE Trans.on Automatic Control*, 36, č.11, s.1228-1240, 1991.
- [61] Čelikovský S.: Global linearization of nonlinear systems - A survey. *Geometry in Nonlinear Control and Differential Inclusions*. Banach Center Publications, vol.32. Institute of Mathematics, Polish Academy of Sciences, Varšava, 1995.

- [62] Deluca A.: Design of an exact nonlinear controller for induction motors. *IEEE Trans.on Automatic Control*, AC-34, č.12, s.1304-1307, 1989.
- [63] Estrada R.F.: On the stability of multiloop feedback systems. *IEEE Trans.on Automatic Control*, AC-17, s.781-791, 1972.
- [64] Glad S.T.: Robustness of nonlinear state feedback. A survey. *Automatica*, sv.23, s.425-435, 1987.
- [65] Haddad W.M., Kapila V.: Absolute stability criteria for multiple slope-restricted monotonic nonlinearities. *IEEE Trans.on Automatic Control*, AC-40, č.2, s.361-365, 1995.
- [66] Haber R., Unbehauen H.: Structure identification of nonlinear dynamic systems. A survey on input/output approaches. *Automatica*, 26, č.4, s.651-678, 1990.
- [67] Havlena V.: Simultaneous parameter tracking and state estimation. *Automatica*, 29, č.4, s.1041-1052, 1993.
- [68] Havlena V.: Adaptive Kalman filter for a MIMO ARMAX system. *Preprints of the 12th IFAC World Congress*, sv.9, Sydney, 1993.
- [69] Hill D.J., Moylan P.J.: The stability of nonlinear dissipative systems. *IEEE Trans.on Automatic Control*, sv. 21, s. 708-711, 1976.
- [70] Hill D.J., Moylan P.J.: Stability results for nonlinear feedback systems. *Automatica*, sv.13, s.377-382, 1977.
- [71] Hill D.J., Moylan P.J.: Dissipative dynamical systems: Basic input-output and state properties. *J.Franklin Inst.*, sv. 309, s. 327-357, 1980.
- [72] Hunt L.R., Su R., Meyer G.: Global transformations of nonlinear systems. *IEEE Trans.on Automatic Control*, AC-28, č.1, s. 24-30, 1983.
- [73] Isidori A., Byrnes C.J.: Output regulation of nonlinear systems. *IEEE Trans.on Automatic Control*, AC-35, č.2, s.131-140, 1990.
- [74] Jakubovič V.A.: Rešenije někotorych matričnych něravěnstv vstrečajuščichsja v těorii avtomatičeskogo regulirovaniya. Dokl. AN SSSR, č.6, 1958.
- [75] Krzseminski Z.: Nonlinear control of induction motor. *Proc. 10th IFAC World Congress*, s.349-354, Mnichov, 1987.
- [76] Kwakernaak H. (ed.): Special Issue on Trends in System Identification. *Automatica*, sv.31, č.12, 1995.
- [77] Lozano-Leal R., Joshi S.M.: Strictly positive real functions revisited. *IEEE Trans.on Automatic Control*, AC-35, s.1243-1245, 1990.
- [78] Mareels I.M., Bitmead R.R.: Nonlinear dynamics in adaptive control. Chaotic and periodic stabilization. *Automatica*, sv.22, č.6, s.641-655, 1986.
- [79] Meyer G., Su R., Hunt L.R.: Application of nonlinear transformations to automatic flight control. *Automatica*, 20, s.103-107, 1984.

- [80] Moore J.B., Anderson B.D.O.: A generalisation of the Popov criterion. *J.Franklin Inst.*, 285, s. 488-492, 1968.
- [81] Ortega R., Canudas C., Seleme S.I.: Nonlinear control of induction motors: Torque tracking with unknown load disturbance. *IEEE Trans.on Automatic Control*, AC-38, č.11, s.1675-1680, 1993.
- [82] Peterka V.: Control of uncertain processes: Applied theory and algorithms. Supplement to *Kybernetika* 22, No.3 - 6, 1986.
- [83] Popov V.M.: Ob absolutnoj ustojčivosti nělinějnych systém avtomatičeskogo regulirovaniya. *Avtomatika i Telemechanika*, č.8, 1961.
- [84] Porter D.W., Michel A.N.: Input-output stability of time-varying nonlinear multiloop feedback systems. *IEEE Trans.on Automatic Control*, AC-19, s.422-427, 1974.
- [85] Rae W.G.: Stability criteria for control systems with many nonlinear elements. *Automatica*, sv.6, s. 463-467, 1970.
- [86] Ray K.S., Majumder D.D.: Application of the circle criteria for stability analysis of linear SISO and MIMO systems associated with fuzzy logic controller. *IEEE Trans. Systems, Man, and Cybernetics*, 14, s.345-349, 1984.
- [87] Singh V.: A stability inequality for nonlinear feedback systems with slope-restricted nonlinearity. *IEEE Trans.on Automatic Control*, AC-29, č.8, 1984.
- [88] Sinha P.K.: State feedback decoupling of nonlinear systems. *IEEE Trans.on Automatic Control*, AC-22, č.6, s.487-489, 1977.
- [89] Sontag E.D.: New characterizations of input-output stability. *IEEE Trans.on Automatic Control*, AC-41, č.9, s. 1283-1294, 1996.
- [90] Štecha J., Havlena V.: Smoothing in simultaneous state and parameters estimation. *Proceedings of Third European Control Conference*, Roma, sv. 4, s. 2165-2170, 1995.
- [91] Utkin V.I.: Variable structure systems with sliding mode: A Survey. *IEEE Trans.on Automatic Control*, AC-22, s.212-222, 1977.
- [92] Vaněček A., Čelikovský S.: Wrapped eigenstructure of chaos. *Kybernetika*, sv.29, č.1, s.73-79, 1993.
- [93] Vaněček A., Čelikovský S.: Synthesis of chaotic systems. *Kybernetika*, sv.30, č.5, s.537-542, 1994.
- [94] Vidyasagar M.: New directions of research in nonlinear system theory. *Proc.IEEE*, sv.74, č.8, s.1060-1091.
- [95] Wen J.T.: Time domain and frequency domain conditions for strict positive realness. *IEEE Trans.on Automatic Control*, AC-33, s.988-992, 1988.
- [96] Willems J.C.: Dissipative dynamical systems. Part I: General theory. *Arch. Rational Mechanics and Analysis*, sv. 45, s.321-351, 1972.

