PUBLICATIONS of M. EROL SEZER

Papers in Refereed Journals:

1. $\sim$ and Ö. Hüseyin (Oral), "Graphical test for positive real matrices," *Archiv fur Electronik und Ubertragungstechnik, 28*, 233-234, 1974.

2. $\sim$ and Ö. Hüseyin (Oral), "A counterexample on 'On the controllability of composite systems'," *IEEE Transactions, AC-22*, 683-684, 1977.

3. $\sim$, "Comments on 'A general solution to output feedback eigenvalue assignment problem'," *Int. J. Control, 26*, 655-656, 1977.

4. $\sim$ and Ö. Hüseyin (Oral), "Input and output regularity of composite systems," *Int. J. Control, 27*, 789-800, 1978.

5. $\sim$ and Ö. Hüseyin (Oral), "Stabilization of linear time-invariant systems using local state feedback," *IEEE Transactions, SMC-8*, 751-756, 1978.

6. $\sim$ and Ö. Hüseyin (Oral), "On the controllability of composite systems,"*IEEE Transactions, AC-24*, 327-329, 1979.

7. $\sim$ and Ö. Hüseyin (Oral), "On decentralized stabilization of interconnected systems," *Automatica, 16*, 205-209, 1980. Also, in *Proc. 7th IFAC World Congress*, 1361-1365, Helsinki, 12-16 June 1978.

8. B. Özgüler, $\sim$ and Ö. Hüseyin (Oral), "Relative primeness of multidimensional polynomial matrices," *IEEE Transactions, CAS-27*, 729-732, 1980.

9. $\sim$ and D. D. Šiljak, "On structural decomposition and stabilization of large-scale control systems," *IEEE Transactions, AC-26*, 439-444, 1981. Also, in *Proc. 17th Annual Allerton Conference*, Monticello, Illinois, 10-12 Oct. 1979.

10. $\sim$ and Ö. Hüseyin (Oral), "Comments on decentralized state feedback stabilization," *IEEE Transactions, AC-26*, 547-549, 1981.

11. $\sim$ and D. D. Šiljak, "On decentralized stabilization and structure of linear large-scale systems," *Automatica, 17*, 641-644, 1981. Also in *Proc. 13th Asilomar Conf.* Pacific Grove, California, 5-7 Nov. 1979.

12. $\sim$ and D. D. Šiljak, "Structurally fixed modes," *Systems & Control Letters, 1*, 60-64, 1981. Also, in *Proc. IEEE Int. Symp. on Circuits and Systems*, p. 558, Chicago, Illinois, April 1981.

13. $\sim$ and D. D. Šiljak, "Robustness of suboptimal control: Gain and phase margin," *IEEE Transactions, AC-26*, 907-911, 1981. Also, in *Proc. 19th IEEE Conf. on Decision and Control*, Albuquerque, New Mexico, 10-12 Dec. 1980.

14. $\sim$ and D. D. Šiljak, "Sensitivity of large-scale systems," *J. Franklin Institute, 312*, 179-197, 1981.

15. V. Pichai, $\sim$ and D. D. Šiljak, "Vulnerability of dynamic systems," *Int. J. Control, 34*, 1049-1060, 1981. Also, in *Proc. 19th IEEE Conf. on Decision and Control*, Albuquerque, New Mexico, 10-12 Dec. 1980.

16. $\sim$ and D. D. Šiljak, "Validation of reduced order models for control system design," *J. Guidance, 5*, 430-437, 1982. Also, in *Proc. 20th IEEE Conf. on Decision and Control*, San Diego, California, 16-18 Dec. 1981.

17. Ö. Hüseyin (Oral), $\sim$ and D. D. Šiljak, "Robust decentralized control using output feedback," *IEE Proceedings, D-129*, 310-314, 1982. Also, in *Proc. 18th Annual Allerton Conf.*, Monticello, Illinois, 8-10 Oct. 1980.

18. V. Pichai, $\sim$ and D. D. Šiljak, "A graph theoretic algorithm for hierarchical decomposition of dynamic systems with applications to estimation and control," *IEEE Transactions, SMC-13*, 197-207, 1983. Also, presented in *Large Scale Systems Symposium*, Virginia Beach, Virginia, 1982.

19. V. Pichai, $\sim$ and D. D. Šiljak, "A graphical test for structurally fixed modes," *Mathematical Modelling, 4*, 339-348, 1983. Also, in *Proc. American Control Conf.*, Arlington, Virginia, 14-16 June 1982.

20. V. Pichai, $\sim$ and D. D. Šiljak, "A graph theoretic characterization of structurally fixed modes," *Automatica, 20*, 247-250, 1984.

21. $\sim$ and D. D. Šiljak, "Nested ε - decompositions and clustering of complex systems," *Automatica, 22*, 321-331, 1986. Also, in *Proc. 9th IFAC World Congress*, Budapest, 2-6 July 1984.

22. B. M. Sarıbatır and $\sim$, "Modeling and control of a wind energy conversion system," *Int. J. Control, 46*, 327-343, 1987. Also, in *National Congress of Electrical Engineers*, 358-363, Çukurova University, Adana, 25-27 Sep. 1985.

23. $\sim$ and D. D. Šiljak, "Robust stability of discrete systems," *Int. J. Control, 48*, 2055-2063, 1988.

24. K. Ünyelioğlu $\sim$, "Optimum feedback patterns in multivariable control systems," *Int. J. Control, 49(3)*, 791-808, 1989. Also in *Preprints of IFAC Symposium on 'Distributed Intelligence Systems'*, 145- 154, Varna, June 27-July 1, 1988.

25. $\sim$ and D. D. Šiljak, "A note on robust stability bounds," *IEEE Transactions, AC-34*, 1212-1215, Nov. 1989.

26. $\sim$ and D. D. Šiljak, "Decentralized multirate control," *IEEE Transactions, AC-35*, 60-65, Jan. 1990.

27. $\sim$ and D. D. Šiljak, "Nested epsilon decomposition of linear systems: Weakly coupled and overlapping blocks," *SIAM J. Matrix Anal. and Appl., 12*, 521–533, 1991. Also, in *Proc. Bilkent Int. Conf. on 'Communication, Control and Signal Processing'*, 827-842, Ankara, 2-5 July 1990.

28. A. Şefik and $\sim$, "A structural analysis of the pole-shifting problem," *Kybernetika, 27(4)*, 333-344, 1991. Also, in *Proc. IFAC Workshop on 'System Structure and Control'*, 151-156, Prague, 25-27 Sep. 1989; and, (in Turkish) *4th National Congress of Electrical Engineers*, Ege University, İzmir, 16-20 Sep. 1991.

29. A. Şefik and $\sim$, "Pole assignment problem: A structural investigation," *Int. J. Contr., 54(4)*, 973-998, 1991.

30. R. Yu and $\sim$, "Decentralized stabilization of interconnected systems: Structural conditions," *Information and Decision Technologies, 18*, 333-345, 1992.

31. M. Ermiş, H. B. Ertan, M. Demirekler, B. M. Sarıbatır, Y. Üçtuğ, ∼ and I. Çadırcı, "Various induction generation schemes for wind-electricity generation," *Electric Power Systems Research, 23*, pp. 71-83, 1992. Also, presented at *13th Congress of the World Energy Conference*, Cannes, France, 5-11 Oct. 1986.

32. O. Ocalı and ∼, "Robust sampled-data control," *IEEE Trans. Autom. Control, 37*, 1591-1597, 1992. Also, in *Proc. Bilkent Int. Conf. on 'Communication, Control and Signal Processing'*, 984-990, Ankara, 2-5 July 1990.

33. M. Bodur and ∼, "Adaptive control of flexible multilink manipulators," *Int. J. Contr., 58(3)*, 519-536, 1993.

34. R. Yu, O. Ocalı and ∼, "Adaptive robust sampled–data control of a class of systems under structured perturbations," *IEEE Trans. Autom. Contr., 38(11)*, 1707–1713, 1993.

35. R. Yu, ∼ and W. Gao, "Algebraic properties of general proper decentralized systems," *Systems & Control Letters, 21*, 241–248, 1993. Also, in *Proc. IFAC/IFORS Symposium on Large Scale Systems: Theory and Applications*, pp. 96–99, Beijing, 22–26 Aug. 1992.

36. ∼ and D. D. Siljak, "On stability of interval matrices," *IEEE Trans. Autom. Contr., 39(2)*, 368–371, 1994. Also, in *Proc. ACC*, pp.3108–3111, San Fransisco, June 1993.

37. M. Karan, ∼ and O. Ocalı "Robust stability of discrete-time systems under parametric perturbations," *IEEE Trans. Autom. Contr., 39(5)*, 991–995, 1994. Also, in *Proc. Bilkent Int. Conf. on 'Communication, Control and Signal Processing'*, 977-983, Ankara, 2-5 July 1990.

38. R. Yu and ∼, "On decentralized adaptive control of interconnected systems with *a priori* knowledge of isolated subsystems," *Control Theory and App., 11(5)*, 545–556, 1994.

39. R. Yu, ∼ and O. Ocalı, "Robust adaptive stabilization of a class of systems under structured nonlinear perturbations with application to interconnected systems," *Int. J. Control, 63*, 183–194, 1996.

40. A. Bhaya, E. Kaszkurevicz, ∼ and D. D. Siljak, "Comments regarding 'On stability of interval matrices'," *IEEE Trans. Autom. Contr., 41*, 762-766, 1996.

41. O. Ocalı and ∼, "Robust adaptive sampled–data control of a class of systems under structured nonlinear perturbations," *IEEE Trans. Autom. Contr. 42(4)*, 553-558, 1997.

42. M. Akar and ∼, "Associative memory design using overlapping decompositions," *Automatica, 37(4)*, 581-587, 2001.

43. ∼ and H. Altunel, "Adaptive Decentralized Control of Interconnected Systems," *Dynamics of Continuous, Discrete, and Impulsive Systems, 11(4-5)*, 521 - 536, 2004.

Papers Presented at Conferences:
(Other than those that are published later in journals)

1. A. Elmaslı, Ö. Hüseyin (Oral) and ∼, "Stability and control of a power system using inverse Nyquist array design technique," *Proc. IFAC Symp. on 'Control in Power Electronics and Electrical Drives'*, 253-266, Dusseldorf, 1974.

2. ∼ and Ö. Hüseyin (Oral), "Design of multivariable control systems (in Turkish)," *Proc. 5th TÜBİTAK Congress*, 401-416, İstanbul, 29 Sep.-2 Oct. 1975.

3. ∼ and Ö. Hüseyin (Oral), "Stability of interconnected systems (in Turkish)," *Proc. 6th TÜBİTAK Congress*, 527-541, İzmir, 24-28 Oct. 1977.

4. ∼ and Ö. Hüseyin (Oral), "Stabilization of interconnected systems using local output feedback," *1st İstanbul Symposium on Large Scale Systems*, İstanbul, 1978.

5. ∼ and D. D. Šiljak, "Stabilization of large scale systems using graph theoretic concepts," *Proc. Joint Automatic Control Conference*, San Fransisco, California, 13-15 Aug. 1980.

6. H. Selbuz, ∼ and D. D. Šiljak, "Two- level control of large scale systems under information structure constraints," *Proc. Joint Automatic Control Conference*, Charlottesville, Virginia, 17-19 June 1981.

7. ∼, A. H. M. Abdur-Rahim and M. S. Ahmed, "Stability studies of power systems," *1st Saudi Engineering Conference*, Jeddah, 1981.

8. ∼, "Minimal essential feedback patterns for pole assignment using dynamic compensators," *Proc. 22nd IEEE Conf. on Decision and Control*, 28-32, San Antonio, Texas, 14-16 Dec. 1983.

9. İ. M. Arabacıoğlu, ∼ and Ö. H. Oral, "Overlapping decomposition of large scale systems into weakly coupled components," in *Computational and Combinatorial Methods in System Theory*, C. I. Byrness and A. Lindquist (ed.), 135-147, North Holland, Amsterdam, 1986. (*Proc. 7th Int. Symposium on Mathematical Theory of Networks and Systems*, Stockholm, 10-14 June 1985.) Also, presented at the *Second İstanbul Symposium on Large Scale Systems*, İstanbul, 1984.

10. M. Bodur and ∼, "Simulation of a mechanical manipulator under the effect of several control structures (in Turkish)," *National Congress of Electrical Engineers*, 865-870, Çukurova University, Adana, 25-27 Sep. 1985.

11. M. Bodur and ∼, "Evolution of robots and their use in industry (in Turkish)," *National Congress of Electrical Engineers*, 782-787, Çukurova University, Adana, 25-27 Sep. 1985.

12. ∼, "Applications of graph theory in control systems," *Symp. on 'Computer and Information Sciences'*, Bilkent Univ., Ankara, 9-10 Oct. 1986.

13. A. Albostan and ∼, "A structure preserving model for transient stability analysis of power systems using direct method of Liapunov (in Turkish)," *2nd National Congress of Electrical Engineers*, 543-546, METU, Ankara, 23-25 Sep. 1987.

14. A. Şefik and ∼, "A graph-theoretic interpretation of structural observability (in Turkish)," METU Elec. Eng. Dept. 30th Anniversary Symp., 8-10 Feb. 1989.

15. $\sim$, R. Yu and O. Ocalı, "On decentralized control of interconnected systems: deterministic and adaptive cases," *Proc. Bilkent Int. Conf. on 'Communication, Control and Signal Processing'*, 857-863, Ankara, 2-5 July 1990.

16. Ü. E. Mumcuoğlu and $\sim$, "On ripple- free deadbeat control problem," *Proc. Bilkent Int. Conf. on 'Communication, Control and Signal Processing'*, 991-997, Ankara, 2-5 July 1990.

17. R. Yu and $\sim$, "Decentralized adaptive model-tracking problems for a class of interconnected systems," *Proc. IEEE Int. Workshop on 'Intelligent Motion Control'*, 49-53, İstanbul, 20-22 Aug. 1990.

18. C. T. Dikmen, M. M. Alaybeyi, S. Topçu, A. Atalar, $\sim$, M. A. Tan and R. A. Rohrer, "A new piece-wise-linear circuit simulator using asymptotic waveform evaluation," presented at *Int. Symp. Circuits and Systems*, Singapore, 11-14 June, 1991.

19. R. Yu, $\sim$ and Ö. Oral, "On decentralized adaptive control of interconnected systems," in *Recent Advances in Mathematical Theory of Systems, Control, Networks and Signal Processing*, H. Kimura and S. Kodama (ed.), 437-442, Mita Press, Osaka, 1992 (*Proc. Int. Symp. on 'Mathematical Theory of Networks and Systems'*, Kobe, 17-21 June 1991).

20. M. Bodur and $\sim$, "Adaptive pole-placement control of rigid robot manipulators (in Turkish)," *Proc. 4th National Congress of Electrical Engineers*, 232-235, İzmir, 16-20 Sep. 1991.

21. M. Bodur, and $\sim$, "Adaptive control of flexible robot manipulators in Cartesian coordinates (in Turkish)," *Proc. 4th National Congress of Electrical Engineers*, 236-239, İzmir, 16-20 Sep. 1991.

22. $\sim$ and Ö. Oral, "Decentralized sampled-data control of interconnected systems," *Proc. 8th IFAC/IFORS/IMACS/IFIP Symposium on 'Large Scale Systems: Theory and Applications'*, 255-258, Patras, 15-17 July, 1998.

23. $\sim$ and Ö. Oral, "Adaptive decentralized control: Continuous-time and sampled-data output feedback," *Proc. IASTED Int. Conference on 'Control and Applications'*, 123-129, Cancun, 24-27 May, 2000.

Others:

1. Ö. Hüseyin (Oral) and ∼, *Elementary Matrix Algebra and Differential Equations*, METU Faculty of Engineering, Pub. No: 45, Ankara, 1975.

2. Ö. Hüseyin (Oral) and ∼, *Matrices and Differential Equations* (in Turkish), METU Faculty of Engineering, Pub. No: 45, Ankara, 1977.

3. Ö. Hüseyin (Oral), , Ö. Yurtseven, ∼ and E. Emre, *Linear Control Systems* (in Turkish), Academy of the Army, Ankara, 1977.

4. ∼, *A Design Procedure for Multivariable Control Systems and Its Applications*, M.S. Thesis, METU Elec. Eng. Dept., Ankara, 1974.

5. Ö. Hüseyin (Oral) and ∼, "Design of linear multivariable systems (in Turkish)," *Electrical Engineering* (Journal of the Chamber of Electrical Engineers of Turkey), *19*, 311-320, 1975.

6. ∼, *An Investigation on the Controllability and the Stability of Large Scale Systems*, Ph.D. Thesis, METU Fac. of Engineering, Ankara, 1978.

7. ∼ and D. D. Šiljak, Suboptimality of reduced-order models in control system design, Technical Report for DARPA Contract No. F30602-80-C-0177, LSS Consulting, Saratoga, California, 1980.

8. D. D. Šiljak, V. Pichai and ∼, *Graph Theoretic Analysis of Dynamic Systems*, Report No: DE- ACO37ET29138-35 for the U. S. Department of Energy, Electric Energy Systems Division, University of Santa Clara, California, 1982.

9. D. D. Šiljak (ed), *Large Power Systems: Structure, Stability, Vulnerability*, Final Report, Project No: DE- ACO37ET29138, U. S. Department of Energy, Electric Energy Systems Division, University of Santa Clara, California, 1982.

10. ∼, *Structural Modeling in Large Scale Systems* (in Turkish), Dissertation, Ankara, 1982.

11. ∼ (ed.), *Control Design for Large Power Systems: A Case Study on SCECO East*, Final Report, SANCST Project No: AR-4-068, University of Petroleum and Minerals, Dhahran, Saudi Arabia, 1984.

12. ∼ (ed.), *Development of an Educational Microcomputer* (in Turkish), Final Report on TAEAGE Project No: 8603-5002, TÜBİTAK Ankara Electronics Research and Development Institute, Ankara, April 1987.

13. A. Albostan and ∼, "Power system stability analysis using Liapunov's second method," *J. Fac. Eng. & Arch. Gazi Univ., 2(2)*, 21-35, 1987.

14. ∼, *Large Scale Systems: Decentralization, Structure Constraints and Fixed Modes*, by L. Trave, A. Titli and A. Tarras. *SIAM Review, 34*, 708-709, Dec. 1990.

15. ∼ and D. D. Siljak, "Decentralized Control," in *The Controls Handbook*, (Ed.) W. S. Levine, 779-793, CRC Press–Times Mirror Books, 1996.