



(Listing of selected articles in current literatures, compiled by M. Masubuchi, K. Fujii, W. Düchting, D. Debeljković, A. Barraud, G. D. Shepard, and J. C. Wang, editor.)

BIOENGINEERING

- "Leg-Load Alarm System for Partial-Weight-Bearing Walking Exercise," S. Miyazaki and H. Iwakura, *Japan J. Medical Electronics and Biol Engng.*, Vol. 16, No. 2, 1978, pp. 89-94.
- "Automatic Analysis of Radiocardiogram Using a Minicomputer," K. Minato, M. Kuwahara, Y. Yonekura, Y. Ishii and A. Hirakawa, *Ibid.*, pp. 95-102.
- "Computer Simulation of the Cerebellar Golgi-Granular System," T. Nakagawa and A. Ohashi, *Ibid.*, pp. 103-108.
- "Pattern Recognition Techniques for the Detection of Epileptic Transients in EEG," W. P. Birkemeier and K. M. MA. (USA), *IEEE Tran. on Biomedical Eng.*, Vol. BME-25, No. 3, May 1978, pp. 213-217.
- "Analysis of Interaction Between Central and Vagal Respiratory Mechanisms in Cats," M. M. Guernstein and J. Milic-Emili, *Ibid.*, pp. 225-235.
- "Signal Processing of Broadband Pulsed Ultrasound: Measurement of Attenuation of Soft Biological Tissues," A. Kak and K. A. Dives, *Ibid.*, Vol. BME-25, No. 4, July 1978, pp. 321-344.
- "ECG/VZG Rhythm Diagnosis Using Statistical signal Analysis - 1: Identification of Persistent Rhythms, 2: Identification of Transient Rhythms," D. E. Gustafson, A. S. Willsley, and J. H. Triebwasser, *Ibid.*, pp. 344-373.
- "Modeling the Control of Cell Growth," L. Alberghina (USA), *Simulation*, Vol. 31, No. 2, Aug. 1978.
- "Application du filtrage de Kalman à l'étude d'un processus biologique," J. P. Godard and M. Minier, *Automatisme*, Vol. XXIII, No. 7-8, Juillet-Aout 1978, pp. 183-189.

COMPUTER TECHNIQUES

- "On One Algorithm for Topological Design of Teleprocessing Networks," N. Yu, *Zhokim, Avt. Telem.* (USSR), No. 5, 1978, pp. 170-173.
- "Using Probabilistic Properties of an Array to Reduce the Ordering Effort," Ya. S. Vilenkin, S. I. Charnaya, *Ibid.*, No. 6, 1978, pp. 153-163.
- "Presentation of Tasks for Modular Computing Structures in Operator Space," F. V. Guzik, *Tekhnicheskaya Kibernetika* (USSR), No. 2, 1978, pp. 111-116.
- "External Problems in Data Processing," I. V. Shretzov, *Ibid.*, No. 2, 1978, pp. 127-135.
- "The Design of Integrated Networks for Message Commutation," A. D. Kirilov and G. M. Mikheyev, *Ibid.*, No. 3, 1978, pp. 122-129.
- "A Technique for Compensating the Filter Performance by a Fictitious Noise," T. Yoshimura and T. Soeda, *ASME J. Dynamic Systems, Measurement and Control*, Vol. 100, No. 2, June 1978, pp. 154-157.
- "Principles of Quantization," A. Gersho (USA), *IEEE Trans. on Circuit and Systems*, Vol. CAS-25, No. 7, July 1978, pp. 16-29.
- "Accurate Simulation of Control Systems with Positional Limits," C. S. Cox, F. W. Wright, and G. L. Brown (USA), *Simulation*, Vol. 30, No. 6, June 1978, pp. 197-202.
- "Interactive Simulation on Minicomputers Part 1: ISIS, a CSSL Language," J. L. Hay, *Ibid.*, Vol. 31, No. 1, July 1978, pp. 1-7.
- "Interactive Simulation on ISIS Minicomputers Part 2: Implementation of the ISIS Language," J. G. Pearce, *Ibid.*, Vol. 31, No. 2, Nov. 1978, pp. 43-53.
- "A Programmable Multichannel-Output Pulse Train Generation for Direct Digital Control," K. Dimoff and J. M. Guay (USA), *IEEE Trans. on Industrial Electronics and Control Instrumentation*, Vol. IECI-25, No. 1, Feb. 1978, pp. 3-10.
- "Digital Set Point Control of Nonlinear Stochastic Systems," R. L. Moose and P. E. Zwicke, *Ibid.*, pp. 38-45.
- "Synthesis of Linear Sequential Machines," J. S. Meditch and M. Inbar, *International Journal of System Science*, Vol. 9, No. 6, June 1978, pp. 709-720.
- "A Characterization of the Class of Structurally Stable Probabilistic Automata, II. Continuous-Time Case," Y. Komoto and M. Kimura, *Ibid.*, Vol. 9, No. 4, Apr. 1, 1978, pp. 395-424.
- "A Characterization of the Class of Structurally Stable Probabilistic Automata, I. Discrete-Time Case," Y. Komoto and M. Kimura, *Ibid.*, pp. 369-394.
- "Managerial Programming for Batch Processes," C. Boer, R. DeMalherbe, L. Lees, and M. C. DeMalherbe, *Ibid.*, Vol. 9, No. 3, Mar. 1978, pp. 273-286.
- "Test aléatoire des mémoires," P. Thevenod-Fosse and R. David, *RAIRO Automatique*, Vol. 12, No. 1, 1978, pp. 43-61.
- "Un programme de détermination des solutions périodiques d'une équation différentielle par la méthode de Schmitt," P. Capiere, *Ibid.*, No. 2, pp. 155-170.

CONTROL SYSTEM COMPONENTS

- "The Coupling Error and Electrical Error of a Synchro System," H. Ariyoshi, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 312-316.
- "Principe et applications aérodynamiques de la vélocimétrie laser," A. Boutier, *Mesures Régulation Automatisme*, Vol. 43, No. 4, avril 1978, pp. 75-87.
- "Contrôle de surfaces par rayon laser," D. Bard, *Ibid.*, No. 5, Mai 1978n, pp. 43-50.

ECONOMIC SYSTEM DYNAMICS

- "The Control of Large-Scale Nonlinear Econometric Systems," G. C. Chow and S. B. Megdal (USA), *IEEE Tran. on Automatic Control*, Vol. AC-23, No. 2, Apr. 1978, pp. 344-349.
- "Market Signaling: An Example of a Two Person Decision Problem with Dynamic Information Structure," Y. C. Ho, and N. P. Kastner, *Ibid.*, pp. 350-361.
- "Pratique de la simulation à la R.A.T.P. : résultats enseignements, perspectives," J. L. Doras, M. Girardot, and E. Heurgon, *Automatisme*, Vol. XXIII, No. 6, Mai-Juin 1978, pp. 124-132.
- "Modèle dynamique d'optimisation à long terme d'un réseau de transport d'énergie électrique," J. C. Dodu, *RAIRO - Recherche Operationnelle*, Vol. 12, No. 2, Mai 1978, pp. 141-167.

ENVIRONMENTAL CONTROL

- "Control of Environmental Pollution and Economic Growth with Technological Progress," Y. Sakawa and Y. Hashimoto, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 332-338.
- "La production de force matrice à partir de l'énergie solaire," R. Laurent, *R.G.E.*, Tome 87, No. 5, Mai 1978, pp. 423-430.
- "L'emploi des fluides organiques dans les turbines solaires," A. Verneau, *Ibid.*, pp. 433-440.

FLUIDICS AND FLUID POWER CONTROL

- "Study of Heat Transfer for a Laminar Boundary Layer and Constant Wall Temperature at the Starting Length of a Pipe," M. V. Legkiz, *Journal of Engineering Physics*, No. 4, 1978, pp. 581-589.
- "Compressed - Arc Dynamic Heat in Metal Cutting," GV. Dayvdenko, D. V. Shimanovich, *Ibid.*, No. 4, 1978, pp. 684-690.
- "The Experimental Results on Thermodynamic Film Boiling Crisis," G. V. Pronko, B. L. Bulanova, *Ibid.*, No. 5, 1978, pp. 785-792.
- "Calculation of Thermal Conductivity of Real Gases and Their Mixtures," R. V. Kamenetzky, *Ibid.*, No. 5, 1978, pp. 849-854.
- "Grained Material Motion in a Vibrational Large - Height Apparatuses," F. A. Ryzhkov and P. A. Baskakov, *Ibid.*, No. 6, 1978, pp. 1048-1054.
- "Heat Transfer in Laminar Visco - Elasto - Plastic Circular Tube Flow," K. L. Filimanova and V. N. Tyabin, *Ibid.*, No. 6, 1978, pp. 1066-1070.
- "A Brief History of Electrohydraulic Servomechanisms," R. H. Maskrey and W. J. Thayer, *ASME J. of Dynamic Systems, Measurement and Control*, Vol. 100, No. 2, June 1978, pp. 110-117.
- "An Analysis of the Three-Way Underlapped Hydraulic Spool Servovalve," C. K. Taft and J. P. Twill, *Ibid.*, Vol. 100, No. 2, June 1978, pp. 117-124.
- "Analysis of Load Switching of Unvented Wall Reattachment Fluidic Devices," T. Wada, A. Shimizu and T. Noritsugu, *Trans of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 297-303.

INSTRUMENTATION DYNAMICS

- "Newly Developed Signal Analyzing System for Doppler Beat by Using Period Measurement," H. Mishina, K. Hironaga, T. Ushizaka, T. Koyama, and K. Horimoto, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 324-331.
- "Acquisition de données pour l'automatisation de fours-creusets à induction," D. George, *Automatisme*, Vol. XXIII, No. 7-8, Juillet-Août 1978, pp. 190-199.
- "Commande de moteur à courant continu quatre quadrants," D. Sornick, *R.G.E.*, Tome 87, No. 4, avril 1978, pp. 291-295.

MACHINE TOOL AND PRODUCTION CONTROL

- "Feedback Control of Saw Blade Temperature with Induction Heating," C. D. Mote, Jr. and S. Holyen, *ASME J. of Eng. for Ind.*, Vol. 100, No. 2, May 1978, pp. 119-127.
- "NC Machining of Arbitrarily Shaped Pockets," N. Persson, *Computer Aided Design*, Vol. 10, No. 3, May 1978, pp. 169-174.

MAN-MACHINE SYSTEMS

- "Dynamics of a Human-Operated Dynamical System (Yo-Yo Control System) . . . on Performance Index in the Light of Optimal Control System" S. Kurosu, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 277-282.
- "Système de reconnaissance automatique des chiffres manuscrits utilisant la transformation de Walsh-Hadamard," A. Mure-Ravoud, *Automatisme*, Vol. XXIII, No. 7-8, Juillet-Août 1978, pp. 212-218.
- "Codage stochastique réalisation d'un modèle numérique du second ordre," D. Thomasset, J. M. Retif, J. P. Masson and R. Reynaud, *Mesures Régulation Automatisme*, Vol. 43, No. 6-7, Juin, Juillet 1978, pp. 77-80.

OPTIMIZATION TECHNIQUES

- "On the Partial Control Problems of the System With Periodic Switchings of the Dynamic Characteristics," T. Kitamura and H. Akashi, *Systems and Control*, Vol. 22, No. 4, 1978, pp. 217-224.
- "A Suboptimal Control for Composite Control Systems by Use of Local Feedback," O. Ono and S. Kobayashi, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 223-229.
- "A Fast Algorithm of a Searching Method by Increase of Coordinates," T. Agui and M. Nakajima, *Ibid.*, pp. 242-247.
- "Suboptimal Control of a Singularly Perturbed Fixed-End-Point Problem," H. Kando and T. Iwazumi, *Ibid.*, pp. 248-255.
- "Considerations of a Penalty Shifting Method for Nonlinear Programming," H. Fujimoto and S. Fujii, *Trans. of the Japan Soc. of Mech. Engrs.*, Vol. 44, No. 382, 1978, pp. 1975-1983.
- "Conditions Sufficient for Optimality of Complex Processes," I. V. Gurman, G. A. Orlov, *Art. telem. (USSR)*, No. 4, 1978, pp. 127-135.
- "On the Method of Moments in Theory of Optimal Control with Input Signals of Different Energies," A. S. Kasyanyuk, *Ibid.*, No. 5, 1978, pp. 5-11.
- "Non-Markov Algorithms for Statistical Optimization with Continuous Time I," Uy. O. Kulehitskiy, *Ibid.*, No. 5, 1978, pp. 73-78.
- "Optimal Registration of Random Event Flows," V. I. Pavlov and B. A. Smirnov, *Ibid.*, No. 6, 1978, pp. 39-50.
- "Non-Markov Algorithms for Statistical Optimization With Continuous Time II," Yu. O. Kulehitskiy, *Ibid.*, No. 6, 1978, pp. 56-67.
- "Stored Response Modeling," J. Eicher, *ASME J. of Dynamic Systems, Measurement and Control*, Vol. 100, No. 2, June 1978, pp. 132-140.
- "A Transformation Method with Two Parameters for Constrained Optimal Control Problems," S. Fujii and H. Fujimoto, *Ibid.*, Vol. 100, No. 2, June 1978, pp. 124-132.
- "Optimum Design of Control System Compensators," K. A. Afimiwala and R. W. Mayne, *Ibid.*, Vol. 100, No. 2, June 1978, pp. 140-152.
- "A Characterization of the Minimizer of a Function," D. C. McDowell, *Journal of Optimization Theory and Application*, Vol. 25, No. 1, May 1978, pp. 1-9.
- "Accelerated Conjugate Direction Methods for Unconstrained Optimization," M. L. Lenard, *Ibid.*, pp. 11-31.
- "Multimodality Analysis of a Class of Multistage Allocation Problems," K. Oi, H. Sayama and T. Takamatsu, *Ibid.*, pp. 33-48.
- "Direct Transformation of Variational Problems into Cauchy Systems. I. Scalar-Quadratic Case," J. Hess and R. Kalaba, *Ibid.*, pp. 49-55.
- "Optimal Control of Systems Governed by a Class of Nonlinear Evolution Equations in a Reflexive Banach Space," N. U. Ahmed and K. L. Teo, *Ibid.*, pp. 57-81.
- "An Existence Theorem for Lagrange Problems in Banach Spaces," O. Caligaris and P. Oliva, *Ibid.*, pp. 83-91.
- "A Short Proof of a General Multiplier Rule," A. Feinstein, *Ibid.*, pp. 93-104.
- "Subspace Exit Properties of Extremal Controls," R. J. Stern, *Ibid.*, pp. 105-115.
- "Control With Conic Control Constraint Set," M. Pachier and D. H. Jacobson, *Ibid.*, pp. 113-123.
- "Discounted Markov Games: Generalized Policy Iteration Method," J. Van der Wal, *Ibid.*, pp. 125-138.
- "Designing Information Structures for Quadratic Decision Problems," K. C. Chu, *Ibid.*, pp. 139-160.
- "A Simplified Test for Optimality," R. Abrams and L. Kerzner, *Ibid.*, pp. 161-170.
- "A Gradient Projection-Multiplier Method for Nonlinear Programming," J. T. Betts, *Ibid.*, Vol. 24, No. 4, Apr. 1978, pp. 523-548.
- "Characterization of Minimal Elements in Minimization Problems with Constraints," B. Brosowski and L. Wuytack, *Ibid.*, pp. 549-567.
- "Affine Minorants Minimizing the Sum of Convex Functions," L. McLinden, *Ibid.*, pp. 569-583.
- "Time-Optimal Control Under State-Dependent Control Restraints," R. J. Stern, *Ibid.*, pp. 585-606.
- "Optimal Economic Growth with Foreign Trade and a Learning Industry," D. W. Luke and J. V. Breakwell, *Ibid.*, pp. 607-616.
- "Differential Dynamic Programming and Separable Programs," K. Ohno, *Ibid.*, pp. 617-637.
- "Lower Closure and Existence Theorems for Optimal Control Problems with Infinite Horizon," G. R. Bates, *Ibid.*, pp. 639-649.
- "Multilevel Stackelberg Strategies in Linear-Quadratic Systems," J. Medanic and D. Radojevic, *Ibid.*, Vol. 24, No. 3, Mar. 1978, pp. 485-487.
- "A Second-Order Lagrangian Condition for Restricted Control Problems," J. Warga, *Ibid.*, pp. 475-483.
- "A Method for Solving Two-Point Boundary Problems of Difference Equations," P. J. Orava and P. A. J. Lautala, *Ibid.*, pp. 459-473.
- "An Infeasible Method of Large-System Optimization by Direct Coordination of Subsystem Inputs," N. Watanabe and M. Matsubara, *Ibid.*, pp. 437-448.
- "Production and Marketing Decisions with Multiple Objectives in a Competitive Environment," J. Bracken and J. T. McGill, *Ibid.*, pp. 449-458.
- "Extensions of CGS Algorithms: Generalized Least-Square Solutions," R. F. Denemeyer, *Ibid.*, pp. 387-419.
- "Generalization of the Dubovitzky-Milutyn Optimality Conditions," I. Lasiecka, *Ibid.*, pp. 421-436.
- "A Class of Continuous Nonlinear Complementarity Problems," E. P. Bojlo and M. A. Hanson, *Ibid.*, Vol. 24, No. 2, Feb., 1978, pp. 243-262.
- "Nonlinear Programming in Normed Linear Spaces," P. J. Bender, *Ibid.*, pp. 263-285.
- "Penalty Function Theory for General Convex Programming Problems," H. Mine and M. Fukushima, *Ibid.*, pp. 287-301.
- "Global Principle for Free-Endpoint Problems in Optimal Control and Differential Games," S. Friedland, *Ibid.*, pp. 303-313.
- "Bang-Bang Control of a Plant with One Positive Real Pole and one Negative Real Pole," I. Vakilzadeh, *Ibid.*, pp. 315-324.
- "Optimization of Functionals Subject to Integral Constraints," R. E. Kalaba and K. Spingarn, *Ibid.*, pp. 325-335.
- "A Multistage Game with Incomplete Information Requiring an Infinite Memory," J. L. Burrow, *Ibid.*, pp. 337-360.
- "A Note on Optimal Fish-Harvest," J. Sanders, *Ibid.*, pp. 361-369.
- "Application of an Operational Calculus to Certain Time-Varying Systems," E. L. Koh, *International Journal of System Science*, Vol. 9, No. 5, May.
- "On the Optimal Control of a Stochastic System with Discontinuous Sample Paths," Y. Yavin and M. Friedman, *Ibid.*, Vol. 9, No. 4, Apr. 1978, pp. 451-465.
- "Multiplier Functions and Duality for Non-Linear Programmes Having a Set Constraint," T. Tanino, H. Nakayama and Y. Sawaragi, *Ibid.*, pp. 467-481.
- "The Design of Finite-Time Optimal Multivariable Systems," *Ibid.*, Vol. 9, No. 3, Mar. 1978, pp. 311-334.
- "Optimal Boundary Scanning Control of Parabolic Systems Using Relaxed Controls," J. C. E. Martin and I. N. Chryssosverghi, *International Journal of Control*, Vol. 27, No. 6, June 1978, pp. 905-915.
- "Analysis and Optimal Control of Time-Varying Linear Systems via Walsh Functions," W. L. Chen and Y. P. Shih, *Ibid.*, pp. 917-932.
- "On the Solution of a Minimax Terminal State Estimation Problem. A Hilbert Space Approach," G. Hexner and M. Mintz, *Ibid.*, pp. 821-830.
- "The Time-Optimal Control of a Class of Non-Linear Singularly Perturbed Systems," S. H. Javid, *Ibid.*, pp. 831-836.
- "A Note on a Convergence Theorem for a Random Optimization Method," N. Baba, *Ibid.*, Vol. 27, No. 5, May 1978, pp. 783-788.
- "A Shooting Method for Solving Two-Point Boundary-Value Problems Arising From Non-Singular Bang-Bang Optimal Control Problems," G. J. Lastman, *Ibid.*, Vol. 27, No. 4, Apr. 1978, pp. 513-524.
- "Bang-Bang Control With Quadratic Performance Index," P. F. Buchens, P. V. Rompay and L. J. Hellinckx, *Ibid.*, pp. 525-537.
- "Optimal Periodic Control of Variable Time-Delay Systems," D. Sinić and J. E. Bailey, *Ibid.*, pp. 347-555.
- "The Clebsch and Jacobi Conditions for Singular Extremals," V. B. Haas, *Ibid.*, pp. 557-570.
- "A Second-Variation Algorithm and the Convergence Conditions for a General Class of Non-Linear Distributed-Parameter Control Systems," G. Zone and K. S. Chang, *Ibid.*, Vol. 27, No. 3, Mar. 1978, pp. 328-350.
- "Series Solution of Matrix Riccati Equation," K. B. Datta, *Ibid.*, pp. 463-472.
- "Reliability of Optimization Procedures for Obtaining Global Optimum," B. Wang and R. Luus (USA), *AIChE Journal*, Vol. 24, No. 4, July 1978, pp. 619-626.
- "Asymptotic Methods in the Optimal Control of Distributed Systems," J. L. Lions, *Automatica*, Vol. 14, pp. 199-211.
- "Adaptive On-Line Steady-State Optimization of Slow Dynamic Processes," W. Bamnager and R. Isermann, *Ibid.*, pp. 223-230.
- "Optimization by Decomposition and Coordination - A Unified Approach," G. Cohen (USA), *IEEE Tran. on Automatic Control*, Vol. AC-23, No. 2, Apr. 1978, pp. 222-232.
- "Decentralized Multicriteria Optimization of Linear Stochastic Systems," T. Basar, *Ibid.*, pp. 233-243.
- "Optimal and Suboptimal Stationary Controls for Markov Chains," P. Varaiya, *Ibid.*, Vol. AC-23, No. 3, June 1978, pp. 388-394.
- "Gütekriterien für Regelungen bei verknüpften Zielgrößen," G. Brack, *messen-steuern-regeln*, (East Germany), Vol. 21, No. 6, S. 307-310, 1978.
- "Mini-max pour des citères multiples," C. Dragusin, *RAIRO - Recherche Opérationnelle*, Vol. 12, No. 2, Mai 1978, pp. 169-180.
- "Un nouvel algorithme pour la programmation non linéaire," J. Abadie, *Ibid.*, pp. 233-238.

POWER AND ENERGY SYSTEM

- "Power System Load Forecasting Using Smoothing Techniques," G. Singh, K. K. Biswas, and A. K. Mahalanabis, *International Journal of System Science*, Vol. 9, No. 4, April 1978, pp. 363-368.
- "Control Strategies for Large-Scale Power Systems," J. D. Delacour, M. Darwish, and J. Fantin, *International Journal of Control*, Vol. 27, No. 5, Mar. 1978, pp. 753-767.
- "Digital Simulation of a Commercial Scale High Temperature Gas-Cooled Reactor Steam Power Plant," A. Ray and H. F. Bowman (USA), *IEEE Trans. on Nuclear Science*, Vol. NS-25, No. 4, Aug. 1978, pp. 1068-1077.
- "Analysis of Nuclear Reactor Systems by Use of the Integration Method," M. S. Shieh and K. W. Han, *Ibid.*, pp. 1078-1084.
- "A New Method for Low Sensitivity Design of a Controller for a Load Following BWR Power Plant," M. P. Somi, M. V. Harihanan, and R. N. Ray, *Ibid.*, pp. 1085-1092.
- "New Developments in Electromagnetic Energy Beaming," E. J. Nalos (USA), *IEEE Proceeding*, Vol. 66, No. 3, Mar. 1978, pp. 276-289.
- "Dynamic Aggregation of Generating Unit Models," A. J. Germond and R. Podmore (USA), *IEEE Trans. on Power Apparatus and System*, Vol. PAS-97, No. 4, July/Aug., pp. 1065-1069.
- "Model Analysis for Power System Dynamic Stability," H. Suzuki, *Ibid.*, pp. 1313-1318.
- "Testing of the Model Analysis for Power System Dynamic Stability," H. Suzuki, *Ibid.*, pp. 1313-1318.
- "Testing of the Model Dynamic Equivalents Technique," N. W. Price, F. J. Lange, and R. F. Silva, *Ibid.*, pp. 1369-1372.

"State Estimation in Power Systems," Detecting Bad Data Through the Sparse Inverse Matrix Method," F. Brussolle, *Ibid.*, Vol. PAS-87, No. 3, May/June 1978, pp. 678-682.

"Power System Model Identification from Large Scale Simulations Using Model Adaptive Reference Control," C. E. Grund, *Ibid.*, pp. 780-788.

"Contribution of Stochastic Control Singular Perturbation Averaging and Team Theories to an Example of Large-Scale Systems: Management of Hydro-power Productions," F. Delebecque and J. P. Chuadrat, Vol. AC-23, Apr. 1978, pp. 208-222.

"The Optimal Decentralized Control of a Large Power System: Load and Frequency Control," E. J. Davison and N. K. Tripathi, *Ibid.*, pp. 312-335.

"Multimachine Power Systems: Stability, Decomposition, and Aggregation," L. B. Jovic, N. R. Pavella, and D. D. Siljak, *Ibid.*, pp. 325-332.

"Hierarchical Control of Power Distribution Systems," S. A. Arafteh, *Ibid.*, pp. 333-343.

"Control of Nuclear Power Plants," B. Frogen and H. S. Rao, *Ibid.*, Vol. AC-23, No. 3, June 1978, pp. 405-417.

"Berührunglose Messung und Überwachung des Luftspalts elektrischer Maschinen," S. Lebeda and H. Lippuner, *BBC-Mitteilungen (West-Germany)*, No. 65, S. 312-317, 1978.

"Regeleigenschaften konventioneller Kraftwerksblöcke," J. Edelmann, and R. Sindelar, *etz-a (West-Germany)*, Vol. 99, No. 7, S. 403-409, 1978.

PROCESS CONTROL

"Models and Algorithms for Multi-level Optimization with Reference to a Petrochemical Control System," A. R. Aliev, M. T. Aliev, M. A. Gadzh, and R. I. Efendiev, *Aut. Telem. (USSR)*, No. 6, 1978, pp. 173-182.

"Hierarchical Dynamic Optimization for Induction Motors Regulations?," M. S. Mahmoud, *International Journal of System Science*, Vol. 9, No. 6, June 1978, pp. 695-708.

"Phase-Plant Analysis of Feedback Control of Unstable Steady States in a Biological Reactor," D. Dibiasio, H. C. Lim, W. A. Weigand, and G. T. Tsao (USA), *AIChE Journal*, Vol. 24, No. 4, July 1978, pp. 686-693.

"Dynamics and Control of the Activated Sludge Wastewater Process," U. Sttir and M. M. Denn, *Ibid.*, pp. 693-698.

"Installation and Operation of a Multivariable Ship Boiler Control System," A. Tyssso and J. C. Drenbo, *Automatica*, Vol. 14, pp. 213-221.

SPACE SYSTEM

"Automatic Attitude Control by Parameterized Steering Method," K. Izumida and T. Yamaguchi, *Trans. Inst. Electronics and Comm. Engrs. of Japan*, Vol. J61-D, No. 6, 1978, pp. 434-441.

"Design of Linear Multivariable Continuous-Time Tracking Systems Incorporating Error-Actuated Dynamic Controllers," B. Porter and A. Bradshaw, *International Journal of Systems Science*, Vol. 9, No. 6, June 1978, pp. 627-637.

"Decoupling the Control of the Orbit and Attitude of a Communications Satellite," N. K. Sinha and J. Y. Yau, *Ibid.*, Vol. 9, No. 3, Mar. 1978, pp. 335-342.

"Adaptive Estimation of the States of a Synchronous Orbit Satellite," N. K. Sinha and S. A. Azim, *Ibid.*, Vol. 9, No. 2, Feb. 1978, pp. 121-127.

"Null Controllability of AMCD-Spacecraft Attitude Control System," *Ibid.*, pp. 205-217.

"Active Control of Airfoils in Unsteady Aerodynamics," A. V. Balakrishnan, *Applied Mathematics and Optimization*, Vol. 4, No. 2, 1978, pp. 171-195.

"Prediction of Pilot-Aircraft Stability Boundaries and Performance Contours," R. F. Stengel and J. R. Broussard (USA), *IEEE Tran. on Systems, Man and Cybernetics*, Vol. SMC-8, No. 5, May 1978, pp. 349-356.

"Decentralized Control in Packet Switched Satellite Communication," F. C. Schoute (USA), *IEEE Tran. on Automatic Control*, Vol. AC-No. 3, No. 2, Apr. 1978, pp. 362-371.

"Simulation de trafic aérien à l'École Nationale de l'Aviation Civile par simulateur cautra," A. Cutullic, S. Redon, and F. Rocipon, *Automatisme*, Vol. XXIII, No. 5-6, Mai-Juin 1978, pp. 139-152.

SYSTEMS AND CONTROL THEORY

"On the Adjusting Conditions of the On-Off Control System With a Signal Stabilization Compensation," T. Tanaka and H. Uchiyama, *Systems and Control*, Vol. 22, No. 4, 1978, pp. 225-231.

"Asymptotic Behavior of Nonlinear Compartmental Systems," Y. Ohta, H. Maeda and S. Kodama, *Trans. Inst. Electronics and Comm. Engrs. of Japan*, Vol. J61A, No. 5, 1978, pp. 441-448.

"On the Input-Output Stability of Linear Time-Varying Systems," Y. Yasuda, H. Ito, and H. Ishizu, *Ibid.*, No. 6, 1978, pp. 519-526.

"On the Preview Control in Systems With Transportation Lag," K. Yamana-aka, K. Uchida, and E. Shimura, *Trans. Inst. Electrical Engrs. of Japan*, Vol. 98-C, No. 3, 1978, pp. 103-110.

"Observers for Linear Time-Delay Systems," M. Ikeda, K. Murakami, and I. Haneda, *Trans. of the Soc. of Inst. and Control Engrs.*, Vol. 14, No. 3, 1978, pp. 217-222.

"Causality of Time Systems With Output Completeness," Y. Takahara and H. Ikeshoji, *Ibid.*, pp. 230-235.

"Sampling Period Sensitivity of the Output Feedback Control Systems," S. Fukata, A. Mohri, and M. Takata, *Ibid.*, pp. 256-261.

"Pole Assignment in Multivariable Systems Using Output Feedback," T. Kotera and T. Araki, *Trans. of the Japan Soc. of Mech. Engrs.*, Vol. 44, No. 382, 1978, pp. 1984-1991.

"Unbounded Control and Observation Systems and Their Duality," A. J. Pritchard and A. Wirth, *SIAM J. on Control and Optimization*, Vol. 16, No. 4, July 1978, pp. 535-546.

"The Equivalence of Strong and Weak Formulations for Certain Problems in Optimal Control," R. Vinter and R. M. Lewis, *Ibid.*, Vol. 16, No. 4, July 1978, pp. 546-571.

"Modal Control of Certain Flexible Dynamic Systems," M. J. Balas, *Ibid.*, Vol. 16, No. 3, May 1978, pp. 450-463.

"Stability Tests for One, Two and Multidimensional Linear Systems," E. I. Jury, *ASME J. of Dynamic Systems, Measurement and Control*, Vol. 100, No. 2, June 1978, pp. 105-110.

"Operations on Fuzzy Numbers," D. Dubois and H. Prade, *International Journal of System Science*, Vol. 9, No. 6, June 1978, pp. 613-626.

"Characterization of the Causality of General Dynamic Systems," *Ibid.*, pp. 638-648.

"A Sector Approach to the Formulation of System Dynamics Models," *Ibid.*, pp. 649-650.

"A Structural Approach to Stability in Linear Systems. A Sufficient Condition," J. Gazon and A. Tits, *Ibid.*, pp. 681-694.

"Model Reduction by Routh Approximations," G. Langholz and D. Feinmesser, *Ibid.*, Vol. 9, No. 5, May 1978, pp. 493-496.

"Canonical Forms for Time-Invariant Linear Control Systems: a Survey With Extensions-Part I. Single-Input Case," J. Maroulas and S. Barnett, *Ibid.*, pp. 497-514.

"Aggregation Method for Linear Large-Scale Systems with Random Coefficients and Inputs," H. Hirata, *Ibid.*, pp. 515-529.

"Design of Linear Multivariable Continuous-Time Output-Feedback Regulators," B. Porter and A. Bradshaw, *Ibid.*, Vol. 9, No. 4, Apr. 1978, pp. 445-450.

"A Walsh Series Approach to Time-Delay Control System Observer Design," P. Stavroulakis and S. Tzafestas, *Ibid.*, Vol. 9, No. 3, Mar. 1978, pp. 287-299.

"Optimal Low-Order Feedback Controllers for Discrete-Time Linear Systems with Inaccessible State," J. O'Reilly, *Ibid.*, pp. 301-309.

"The Performance and Sensitivity of Classical Control Systems," V. Zakian, *Ibid.*, pp. 343-355.

"Pole-Placement Design of Multiple Controller Systems via Weak and Strong Controllability," J. H. Chow, *Ibid.*, Vol. 9, No. 2, Feb. 1978, pp. 129-135.

"Least Squares Observer Design for Continuous Stochastic Systems," M. M. Missaghie and F. W. Fairman, *Ibid.*, pp. 137-146.

"A Conceptual Foundation for Systems Problem Solving," R. Cavallo and G. J. Klir, *Ibid.*, pp. 219-236.

"Design of Linear Multivariable Discrete-Time Tracking Systems Incorporating Error-Actuated Controllers," A. Bradshaw and B. Porter, *Ibid.*, pp. 185-191.

"The General Problem of Pole Assignment," H. H. Rosenbrock and G. E. Hayton, *International Journal of Control*, Vol. 27, No. 6, June 1978, pp. 837-852.

"An Optimal Observer Design for Discrete Linear Systems," C. G. Kim, P. Kudva, and V. Gourishankar, *Ibid.*, pp. 879-884.

"Design of Linear Time-Invariant Systems by Periodic Output Feedback. Part I. Discrete-Time Pole Assignment," A. B. Chammass and C. T. Leondes, *Ibid.*, pp. 885-894.

"On the Design of Linear Time-Invariant Systems, by Periodic Output Feedback. Part II. Output Feedback Controllability," A. B. Chammass and C. T. Leondes, *Ibid.*, pp. 895-903.

"Algorithm for Closed-Loop Eigenstructure Assignment by State Feedback in Multivariable Linear Systems," B. Porter and J. J. D'Azzo, *Ibid.*, pp. 943-947.

"Regions of Local Stability for Non-Autonomous Discrete Systems," P. Diamond, *Ibid.*, pp. 943-958.

"Iterative-Solution of Constrained Differential/Algebraic Systems," D. H. Owens and R. P. Jones, *Ibid.*, pp. 957-974.

"On a New Definition of Strict System Equivalence," A. C. Pugh and A. K. Shelton, *Ibid.*, Vol. 27, No. 5, May 1978, pp. 657-672.

"The Effect of Compensator Restrictions on Pole-Shifting," P. A. Cook, *Ibid.*, pp. 695-703.

"Gain Margins and Root Locus Asymptotic Behavior in Multivariable Design. Part I. The Properties of the Markov Parameters and the Use of High Feedback Gain," B. Kouvaritakis, *Ibid.*, pp. 705-724.

"Gain Margins and Root Locus Asymptotic Behavior in Multivariable Design. Part II. A Critical Appraisal of Frequency Response Methods from a Root Locus Point of View," B. Kouvaritakis, *Ibid.*, pp. 725-751.

"Synthesis of Non-Linear Time-Varying Feedback Systems With Significant Parameter Uncertainty," U. Shaked, *Ibid.*, pp. 769-782.

"Input and Output Regularity of Composite Systems," E. Seizer and O. Husbyin, *Ibid.*, pp. 789-800.

"The Stability of Linear Time-Varying Systems," M. Malek-Zavarei, *Ibid.*, pp. 809-815.

"Observers for Linear Discrete Multivariable Systems With Inaccessible Inputs," P. Kudva and V. Gourishankar, *Ibid.*, Vol. 27, No. 4, Apr. 1978, pp. 539-546.

"Steady-State Decoupling of Linear Multivariable Systems," J. Y. Huang and G. J. Thaler, *Ibid.*, pp. 579-587.

"Transformation of a Linear Time-Varying System Into a Linear Time-Invariant System," M. Y. Wu, *Ibid.*, pp. 589-602.

"A Note on Diagonal Dominance and the Stability of Multivariable Feedback Systems," D. H. Owens, *Ibid.*, pp. 603-608.

"Transfer-Function Synthesis Using Output Feedback," M. R. Javdan, *Ibid.*, pp. 609-619.

"Singular Perturbation Methods in the Design of Linear Multivariable Tracking Systems for Plants With Polynomial Command Inputs," B. Porter and A. Tsingas, *Ibid.*, pp. 639-650.

"Synthesis of Linear Time-Varying Non-Minimum-Phase Systems With Plant Uncertainty," I. Horowitz and M. Sidi, *Ibid.*, Vol. 27, No. 3, Mar. 1978, pp. 351-359.

"Optimum Synthesis of Non-Minimum Phase Feedback Systems With Plant Uncertainty," I. Horowitz and M. Sidi, *Ibid.*, pp. 361-386.

"Transfer-Function Matrix Synthesis by Matrix Generalized Inverses," V. Lovass-Nagy, R. J. Miller and D. L. Powers, *Ibid.*, pp. 387-391.

"Limit-Cycle Phenomena in Non-Linear Time-Delay Systems," P. G. D. Barkham and A. C. Soudack, *Ibid.*, pp. 407-420.

"Optimal Closed-Loop Poles Assignment," Y. Bar-Ness, *Ibid.*, pp. 421-430.

"Analysis and Control of Fuzzy Systems Using Finite Discrete Relations," R. M. Tong, *Ibid.*, pp. 431-440.

"On the Estimating Errors and the Structures of Identity Observers and Minimal Order State Observers," T. Mita, *Ibid.*, pp. 441-454.

- "Canonical Forms for Aggregated Models," J. Hickin and N. K. Sinha, *Ibid.*, pp. 473-485.
- "Output Feedback Stabilization by Minimization of a Spectral Radius Functional," L. F. Miller, R. G. Cochran, and J. W. Howze, *Ibid.*, pp. 455-462.
- "Closed-Loop Eigenstructure Assignment by State Feedback in Multivariable Linear Systems," B. Porter and J. J. D'Azzo, *Ibid.*, pp. 487-492.
- "The Absolute Stability of High-Order Discrete Time Systems Utilizing the Saturation Nonlinearity," D. Mitra (USA), *IEEE Tran. On Circuit and Systems*, Vol. CAS-25, No. 6, June 1978, pp. 365-371.
- "Asymptotic Behavior of Nonlinear Compartmental Systems: Nonoscillation and Stability," H. Maeda, S. Kodama, and Y. Ohta, *Ibid.*, pp. 372-378.
- "On the Mathematical Foundations of Compartmental Analysis in Biology, Medicine, and Ecology," I. W. Sandberg, *Ibid.*, pp. 273-279.
- "A Unified Approach to Model-Reference Adaptive Systems Part I: Theory, and Part 2: Application of Conventional Design Techniques," B. K. Colburn and J. S. Boland (USA), *IEEE Tran. on Aerospace and Electronic Systems*, Vol. AES-14, No. 3, May 1978, pp. 501-524.
- "Some Recent Application of Distributed Parameter Systems Theory - A Survey," W. H. Ray, *Automatica*, Vol. 14, May 1978, pp. 281-287.
- "Survey of Decentralized Control Methods for Large Scale Systems," N. R. Sandell, P. Variya, M. Athans, and M. G. Safonov (USA), *IEEE Tran. on Automatic Control*, Vol. AC-23, No. 2, Apr. 1978, pp. 108-128.
- "Stability of Large-Scale Nonlinear Systems-Quadratic-Orders Theory of Composite System Method Using M-Matrices," M. Araki, *Ibid.*, pp. 129-142.
- "Stability Criteria for Large-Scale Systems," P. J. Moylan and D. J. Hill, *Ibid.*, pp. 143-149.
- "Input-Output Stability of Interconnected Systems Using Decompositions: An Improved Formulation," F. M. Callier, W. J. Chan, and C. A. Desoer, *Ibid.*, pp. 150-163.
- "The Stabilization of Digraphs of Variable Parameter Systems," P. E. Caines and R. S. Printis, *Ibid.*, pp. 163-173.
- "Some Approximation Methods for Estimation and Control of Large-Scale Systems," M. Aoki, *Ibid.*, pp. 173-182.
- "Controllability Under Decentralized Information Structure," H. Kobayashi, H. Hamafusa, and T. Yoshitawa, *Ibid.*, pp. 182-188.
- "On-Line Hierarchical Control for Steady-State Systems," W. Findeisen, K. Malinowski, and A. Wozniak, *Ibid.*, pp. 189-209.
- "Leader-Follower Strategies for Multilevel Systems," J. B. Cruz, *Ibid.*, pp. 244-255.
- "Decentralized Robust Control of Unknown Systems Using Tuning Regulations," E. J. Davison, *Ibid.*, pp. 276-289.
- "Control Strategies for Decision Makers Using Different Models of the Same System," H. K. Khalil and P. V. Kokotovic, *Ibid.*, pp. 289-298.
- "Multilayer Control of Large Chains," J. Forestier and P. Varaiya, *Ibid.*, pp. 298-305.
- "Teams, Signaling, and Information Theory," Y. C. Ho, M. P. Kastner, and Wong, *Ibid.*, pp. 305-312.
- "Quadratic Weights for Asymptotic Regulator Properties," C. H. Harvey and G. Stein, *Ibid.*, Vol. AC-23, No. 3, June 1978, pp. 378-387.
- "Entwurf zeitvarianter Systeme durch Polvorgabe," Otto Föllinger, *Regelungstechnik*, West-Germany, Vol. 26, No. 6, S. 189-196.
- "Réseau de Pétri et automates programmables," J. M. Toulotte, *Automatisme*, Vol. XXIII, No. 7-8, Juillet-Août 1978, pp. 200-211.
- "Détermination de contre réactions stabilisantes pour une classe de systèmes linéaires en non linéaires," M. Drouin, *RAIRO, Automatique*, Vol. 12, No. 1, 1978, pp. 5-21.
- "Estimation de l'entropie dans le cas continu en vue de la décomposition des systèmes complexes," B. Yvinec, M. Milgrain, and B. Dubuisson, *Ibid.*, pp. 23-42.
- "Systèmes à dynamique complexe et bifurcations de type <<boîtes itées >> cas des récurrences d'ordre 1 déterminées une fonction à un seul extremum," C. M. A, *Ibid.*, pp. 63-94.
- "Identification of Higher Order Stochastic Distributed Parameter Systems," C. S. Kubrusly, *RAIRO, Automatique*, Vol. 12, No. 1, 1978, pp. 131-153.
- "Systèmes à dynamique complexe et bifurcations de type <<boîtes emboîtées >> cas des récurrences d'ordre 1 déterminées par une fonction à un seul extremum," 2^e me partie: cas générale, C. Mira, *Ibid.*, pp. 171-190.
- "Sur un problème d'optimisation de l'équation matricielle de Ljapunov," J. C. Geromel, *Compte-Rendus Académie des Sciences, Paris*, t. 286, 16 Mai 1978, pp. 843-846.
- "Utilisation de la formule de Kwakernaek en temps discret pour la résolution d'un problème de filtrage non linéaire," D. Cyrot, *Ibid.*, tome 287, 10 Juillet 1978, pp. 93-96.
- "Un théorème de stabilité pour une classe des systèmes à contre réaction," H. M. Silveira and I. D. Landau, *Ibid.*, 17 juillet 1978, pp. 161-162.
- "Sur la détermination d'un observateur de dimension finie pour une classe de systèmes linéaires à paramètres répartis," A. El Jai M. Amouroux, *Ibid.*, pp. 163-166.
- SYSTEM MODELLING AND IDENTIFICATION**
- "The Backside Parameter Viewed from Optimal Control," K. Kato and K. Sato, *J. of Aft.*, Vol. 15, No. 2, Feb. 1978, pp. 67-69.
- "Attitude Control of a Satellite with Medium-Size Flexible Solar Arrays," J. B. Plant and R. K. Maxwell, *J. of Spacecraft and Rockets*, Vol. 14, No. 10, Oct. 1977, pp. 577-599.
- "On the Estimation of Noise Covariances in Linear Discrete-Time Systems," T. Tabuchi, T. Soeda, and T. Yoshimura, *International Journal of System Science*, Vol. 9, No. 5, May 1978, pp. 531-542.
- "Parameter Identification for a Two-Dimensional Image Field," T. Katayama and Y. Fujii, *Ibid.*, pp. 543-562.
- "Mean-Square Convergence of Least-Squares Identification of White-Noise-Driven Time-Series Models," D. Graupe and E. Fogel, *Ibid.*, pp. 563-567.
- "A Non-Parametric Approach to the Identification of Linear Multivariable Systems," N. K. Sinha, A. K. Mahalanabis and H. El. Sherief, *Ibid.*, Vol. 9, No. 4, Apr. 1978, pp. 425-430.
- "Synthesis of Input Signals in Parameter Identification in Static Systems," S. Tanaka, *Ibid.*, pp. 431-443.
- "Factor-Analysis Estimation of Simultaneity-Error Models," W. T. Lin, *Ibid.*, Vol. 9, No. 3, Mar. 1978, pp. 243-257.
- "Identification of a Class of Time-Variable Linear Systems Via its Output Covariance Function," J. Rootenberg and S. A. Ghozati, *Ibid.*, pp. 259-264.
- "Innovation Approach to Distributed-Parameter Detection and Estimation," S. G. Tzafestas, *Ibid.*, Vol. 9, No. 2, Feb. 1978, pp. 147-184.
- "Identification and Analysis of Non-Linear Systems by Tensor Techniques," J. Sandor and D. Williamson, *International Journal of Control*, Vol. 27, No. 6, June 1978, pp. 853-878.
- "Convergence of an Adaptive Filter Algorithm," L. Ljung, *Ibid.*, Vol. 29, No. 5, May 1978, pp. 673-693.
- "The Asymptotic Joint Distribution of the Estimated Autoregressive Coefficients," H. Tong, *Ibid.*, pp. 801-807.
- "Generalized Hessenberg Transformations for Reduced-Order Modelling of Large-Scale Systems," E.C.Y., Tse, J. V. Medanic and W. R. Perkins, *Ibid.*, Vol. 27, No. 4, Apr. 1978, pp. 493-512.
- "Optimal Timing of the Observation for the State Estimation and Control of the Stochastic Discrete Linear System," Y. Sawaragi, T. Soeda, Y. Tomita and I. Inai, *Ibid.*, pp. 621-637.
- "A Suboptimal Identification of Noise Covariances in Discrete-Time Linear Systems," T. Soeda, T. Yoshimura, and T. Tabuchi, *Ibid.*, Vol. 27, No. 3, Mar. 1978, pp. 393-406.
- "Error Behaviour of Multistep Methods Applied to Unstable Differential Systems," R. L. Brown, *Applied Mathematical Modelling*, Vol. 2, No. 2, June 1978, pp. 115-118.
- "Improvement of Dynamic Models by Inverse Eigenproperty Assignment," G. Fradellos and F. J. Evans, *Ibid.*, pp. 123-129.
- "State Estimation for Discrete Systems With Switching Parameters," C. B. Chang and M. Athans (USA), *IEEE Tran. on Aerospace and Electronic Systems*, Vol. AES-14, No. 3, May 1978, pp. 418-425.
- "On-Line Gain Identification of Flow Processes with Application to Adaptive ph Control," S. R. Gupta and D. R. Coughanown (USA), *AIChE Journal*, Vol. 24, No. 4, July 1978, pp. 654-664.
- "A Theoretical Analysis of Recursive Identification Methods," T. Soderstrom, L. Ljung and I. Gustavsson, *Automatica*, Vol. 14, pp. 231-244.
- "Specific Structures for Large-Scale State Estimations Algorithms Having Information Exchange," C. W. Sanders, E. C. Tacker, and T. D. Linton (USA), *IEEE Tran. on Automatic Control*, Vol. AC-23, No. 2, Apr. 1978, pp. 255-261.
- "A Decentralized Computational Algorithm for the Global Kalman Filter," M. F. Hassam, G. S. Madam, and A. Titli, *Ibid.*, pp. 263-268.
- "Modele discret de relation proie-predateur," S. Gentil, *Compte-Rendus Academie des Sciences, Paris*, t. 286, 22 Mai 1978, pp. 973-976.
- TRANSPORTATION**
- "On Decentralized Estimation and Control With Application to Freeway Ramp Metering," D. P. Looze, P. K. Houpt, N. R. Sandell and M. Athans, (USA), *IEEE Tran. on Automatic Control*, Vol. AC-23, No. 2, Apr. 1978, pp. 268-275.
- "Simulation und Verifizierung komplexer Systeme am Beispiel der Magnet-schwebbahn," J. Sammerer, *Regelungstechnik*, Vol. 26, No. 6 (West-Germany), S. 177-182, 1978.
- URBAN DYNAMICS AND SOCIAL PROBLEMS**
- "Field-Dependent Model of Crowd Flow in Emergency," I. Yoshihara, K. Nakao and M. Ohnari, *Trans. Inst. Electrical Engrs. of Japan*, Vol. 98-C, No. 4, 1978, pp. 111-118.
- "Calculation of Horizontal Two-Dimensional Water Temperature Distribution in the Sea Surface Effected by Waste Cooling Water," T. Ishida and Y. Suzuki, *Ibid.*, Vol. 98-C, No. 6, 1978, pp. 175-182.
- "Economic System: a Multi-Dimensional Model," D. K. Bhargava and P. S. Satsangi, *International Journal of System Science*, Vol. 9, No. 6, June 1978, pp. 603-612.
- "The Optimal Investment for the Control of Environmental Pollution and Economic Growth," Y. Sakawa and Y. Ueda, *Ibid.*, Vol. 9, No. 2, Feb. 1978, pp. 193-203.
- "Integro-Differential Equations Arising in Population Dynamics and Control Systems," A. S. C. Sinha, *Ibid.*, Vol. 27, No. 4, Apr. 1978, pp. 571-577.
- "MEDIECS, a Simulator for Mediterranean Ecosystems," P. C. Miller, W. A. Stoner, and S. P. R. Richards (USA), *Simulation*, Vol. 30, No. 6, June 1978, pp. 173-190.
- "Using Sensitivity Analysis to Simplify Ecosystem Models: a Case Study," M. R. Rose and R. Harmsen, *Ibid.*, Vol. 31, No. 1, July 1978, pp. 15-26.
- "Nonequilibrium Dynamics of Dissipative Systems and its Application to a Macroeconomic System," K. Matsuno (USA), *IEEE Trans. on Systems, Man and Cybernetics*, Vol. SME-F, No. 7, July 1978, pp. 526-539.
- "Economic Fluctuations: a Framework for Analysis and Policy Design," N. J. Mass, *Ibid.*, No. 6, June 1978, pp. 437-449.
- "Alternative Tests for the Selection of Model Variables," N. J. Mass and P. M. Senge, *Ibid.*, pp. 450-460.
- MANAGEMENT**
- "Optimum Ordering Policies with Two Kinds of Lead Times and Non-Linear Ordering Costs," N. Kaio and S. Osaki, *International Journal of System Science*, Vol. 9, No. 3, Mar. 1978, pp. 265-272.
- "Information Systems and Decision Processes in Higher Education," J. B. Palmer and B. K. Kegna (USA), *IEEE Tran. on System, Man and Cybernetics*, Vol. SMC-8, No. 7, July 1978, pp. 517-526.
- ACOUSTICS AND NOISE**
- "Multidimensional Pseudo-Maximum-Likelihood Pitch Estimation," D. H. Friedman (USA), *IEEE Tran. on Acoustics, Speech and Signal Processing*, Vol. ASSP-26, No. 3, June 1978, pp. 185-196.