

## Control and Cybernetics

vol. **34** (2005) No. 4

Alphabetical list of contributors of volume 34 (2005)  
FIRST AUTHOR, title, issue number, pages

---

- R. ABU-ZITAR, A.M. AL-FAHED NUSEIRAT: A rule based machine learning approach to the nonlinear multifingered robot gripper problem, 553-573.
- G. ALLAIRE, F. de GOURNAY, F. JOUVE, A.-M. TOADER: Structural optimization using topological and shape sensitivity via a level set method, 59-80.
- J. ALLWRIGHT, R. VINTER: Second order conditions for periodic optimal control problems, 617-643.
- S. AMSTUTZ, I. HORCHANI, M. MASMOUDI: Crack detection by the topological gradient method, 81-101.
- Z. ARTSTEIN: Bang-bang controls in the singular perturbations limit, 645-663.
- V. BARBU, L. LASIECKA, M.A. RAMMAHA: Existence and uniqueness of solutions to wave equations with nonlinear degenerate damping and source terms, 665-687.
- E. BARTKOWIAK, I. PAWŁOW: The Cahn-Hilliard-Gurtin system coupled with elasticity, 1005-1043.
- M. BENDSØE, E. LUND, N. OLHOFF, O. SIGMUND: Topology optimization – broadening the areas of application, 7-35.
- H. BOLANDI, A.F. EHYAEI, S.M. ESMAEILZADEH: Design of a novel control algorithm for a 6 D.O.F. mobile manipulator based on a robust observer, 1057-1074.
- D. BORS: Superlinear elliptic systems with distributed and boundary controls, 987-1004.
- D. BUCUR: How to prove existence in shape optimization, 103-116.
- A. CAETANO, A. SARYCHEV, D. SEABRA: Two-dimensional stable Lavrentiev phenomenon with and without boundary conditions, 689-707.
- I. CHRYSOVERGHI: Approximate gradient projection method with general Runge-Kutta schemes and piecewise polynomial controls for optimal control problems, 425-451.
- L. CIUPALĂ: A scaling out-of-kilter algorithm for minimum cost flow, 1169-1174.
- F. CLARKE: The maximum principle in optimal control, then and now, 709-722.
- M. DAMBRINE, G. VIAL: Influence of a boundary perforation on the Dirichlet energy, 117-136.
- M.C. DELFOUR, J.-P. ZOLÉSIO: Shape identification via metrics constructed from the oriented distance function, 137-164.

- J.-A. DÉSIDÉRI, J.-P. ZOLÉSIO: Inverse shape optimization problems and application to airfoils, 165-202.
- A.V. DMITRUK: On a nonlocal metric regularity of nonlinear operators, 723-746.
- L. DRUŻKOWSKI: On the global asymptotic stability problem and the Jacobian conjecture, 747-762.
- K. EPPLER, H. HARBRECHT: A regularized Newton method in electrical impedance tomography using shape Hessian information, 203-225.
- U. FELGENHAUER: Optimality properties of controls with bang-bang components in problems with semilinear state equation, 763-785.
- H. FRANKOWSKA: Optimal synthesis via superdifferentials of value function, 787-803.
- C. GRACZYKOWSKI, T. LEWIŃSKI: The lightest plane structures of a bounded stress level transmitting a point load to a circular support, 227-253.
- X. GUO, K. ZHAO, M.Y. WANG: A new approach for simultaneous shape and topology optimization based on dynamic implicit surface function, 255-282.
- J. HALAWA: Determining the settings of PI and PID controllers with a convergent method using computer aided design, 1075-1091.
- J. HASLINGER, J. MÁLEK, J. STEBEL: A new approach for simultaneous shape and topology optimization based on dynamic implicit surface function, 283-303.
- A. HENROT, J. SOKOŁOWSKI: Mathematical challenges in shape optimization, 37-57.
- M. HINTERMÜLLER: Fast level set based algorithms using shape and topological sensitivity information, 305-324.
- W. HORN, J. SOKOŁOWSKI: A model for passive damping of a membrane, 325-337.
- A. IOFFE: On necessary conditions in variable end-time optimal control problems, 805-818.
- B. JAKUBCZYK, W. RESPONDEK: Phase portraits of planar control-affine systems, 819-847.
- T. KACZOREK: Reachability and minimum energy control of positive 2D systems with delays, 411-423.
- L. KNOPIK: Some results on the ageing class, 1175-1180.
- J. KOWYNIA: An algorithm for checking Hurwitz stability of  $K$ -symmetrizable interval matrices, 477-486.
- P. KULCZYCKI, A. MAZGAJ: An algorithm for Bayes parameter identification with quadratic asymmetrical loss function, 1127-1148.
- P. KULCZYCKI, J. WAGŁOWSKI: On the application of statistical kernel estimators for the demand-based design of a wireless data transmission system, 1149-1167.
- K.J. LATAWIEC: Control zeros and maximum-accuracy/maximum-speed control of LTI MIMO discrete-time systems, 453-475.

- J. MIELNICZUK, P. WOJDYLŁO: Wavelets for time series analysis – a survey and new results, 1093-1125.
- S. MINKEVIČIUS, S. STEIŠUNAS: On global maxima in multiphase queues, 575-588.
- B. MORDUKHOVICH, D. WANG: Optimal control of semilinear evolution inclusions via discrete approximations, 849-870.
- K. NACHI, J.-P. PENOT: Inversion of multifunctions and differential inclusions, 871-901.
- S.A. NAZAROV, J. SOKOŁOWSKI: Self-adjoint extensions of differential operators and exterior topological derivatives in shape optimization, 903-925.
- A.A. NOVOTNY, R.A. FELJÓO, C. PADRA, E. TAROCO: Topological derivative for linear elastic plate bending problems, 339-361.
- N.P. OSMOLOVSKII, H. MAURER: Equivalence of second order optimality conditions for bang–bang control problems. Part 1: Main results, 927-950.
- A. PIEGAT: On practical problems with the explanation of the difference between possibility and probability, 505-524.
- J.R. ROCHE: Adaptive Newton-like method for shape optimization, 363-377.
- S. ROLEWICZ: Paraconvex analysis, 951-965.
- Y.J. SUN: Less conservative results for the exponential stability of uncertain time-delay systems, 1045-1055.
- J. STAŃCZAK: Optimal control of multistage deterministic, stochastic and fuzzy processes in the fuzzy environment via an evolutionary algorithm, 525-552.
- M. TLAS, B. ABDUL GHANI: A logarithmic barrier function method for solving nonlinear multiobjective programming problems, 487-504.
- V.V. VELIOV: Error analysis of discrete approximations to bang-bang optimal control problems: the linear case, 967-982.
- D. WACHSMUTH: Regularity and stability of optimal controls of nonstationary Navier-Stokes equations, 387-409.
- K. WORWA: A discrete-time software reliability-growth model and its application for predicting the number of errors encountered during program testing, 589-606.