
CONTENTS

R. M. ADAMS, R. BIGGS, C. C. REMSING: Equivalence of control systems on the Euclidean group $SE(2)$	513
Z. NANIEWICZ , P. PUCHAŁA: Nonconvex minimization related to quadratic double-well energy – approximation by convex problems	525
J. TABOR AND J. TABOR: Paraconvex, but not strongly, Takagi functions	545
M.M. MÄKELÄ, Y. NIKULIN, J. MEZEI: Generalizing trade-off directions in multiobjective optimization	561
Z. KÁTAI: Solving Markov decision processes by d-graph algorithms	577
M. MATŁOKA: Soft set mappings and their properties	595
J. MERIGÓ: OWA operators in the weighted average and their application in decision making	605
X. ZHANG AND Z. XU: An MST cluster analysis method under hesitant fuzzy environ- ment	645
M. PAROL, D. BACZYŃSKI, J. BROŹEK: Optimization of urban MV multi-loop electric power distribution networks structure using Artificial Intelligence methods	667
J. BOBULSKI: Access control system using face image	691