

Contents

Summaries	13
Wojciech Bożejko, Józef Grabowski, Mieczysław Wodecki	
Blocks in the Total Tardiness Flow Shop Problem	41
Wojciech Bożejko, Mieczysław Wodecki	
Parallel Scatter Search Algorithm for Flow Shop Problem with C_{sum} Criterion	53
Zbigniew Buchalski	
An Heuristic Algorithm for Tasks Scheduling on Parallel Machines System with Limited Resources	61
Jacek Dajda, Grzegorz Dobrowolski	
Systems Approach towards Modern Methods of Software Development	71
Dariusz Dereniowski, Marek Kubale	
A Formal Model for the Bug Localization Problem	81
Grzegorz Dobrowolski, Jarosław Koźlak, Edward Nawarecki	
Modelling of Anomalies and Crisis Situations in Decentralised Systems	89
Jan Tadeusz Duda	
Statistical and Rule-Enhanced Methods of Time Series Segmentation	103
Józef Grabowski, Jarosław Pempera	
The Methods of Diversification of Local Search in Flow Shop Problem with Sum of Completion Times Criteria	117
Waldemar Kaczmarczyk	
Distribution Planning for Variable Demand under Vendor Managed Inventory Contract	129
Waldemar Kaczmarczyk	
Reformulations of the Proportional Lot-Sizing and Scheduling Model with Identical Parallel Machines	139
Piotr Kadłuczka, Wojciech Chmiel	
Exploitation of Properties of QAP Problem in Evolutionary Algorithms Construction	151

Piotr Kadłuczka, Jacek Piwowarczyk, Wojciech Chmiel Concurrent Evolutionary Algorithm with Self-Adaptation	161
Joanna Kwiecień, Bogusław Filipowicz The Application of Queueing Theory in Modelling of Elementary Mental Processes	171
Piotr Łebkowski Petri Nets of the Materials Flow at the Steel Plant	179
Marek Magiera Comparative Analysis of the Three Production Planning Methods for Flow Shops without Stores	191
Wojciech Mitkowski, Krzysztof Oprzędkiewicz A Robust Discrete Dynamic Compensator for an Uncertain-Parameter Parabolic System	203
Grzegorz J. Nalepa, Antoni Ligęza, Igor Wojnicki From Content to Knowledge: a Perspective on CMS	217
Krzysztof Oprzędkiewicz An Implementation of Special Control Algorithms at the PC-Based “soft PLC” Platform	227
Tadeusz Sawik Integrated Scheduling in a Customer Driven Supply Chain	243
Piotr Sienkiewicz Mathematical Confrontational States Models	257
Piotr Sienkiewicz Optimalization at Security Systems Management	267
Czesław Smutnicki, Adam Smutnicki New Properties of Cyclic Schedules in Flow Shop System	275
Wojciech Szmuc Coloured Petri Nets in UML Object Concept Modelling	287

Adam Tyński

Application of the New Crossover Operator
for Solving the Job-Shop Scheduling Problem with Transportation 297

Konrad Wala

Tabu Algorithm
for Optimization of the Generalized Assignment Problem 309

Małgorzata Żabińska

Agent System for Realization of Operations 317

Style Sheet 330