Contents

Contents	V
Sequential Approximate Multiobjective Optimization using Computational Intelligence	1
Hirotaka Nakayama	1
Composition Vector Method for Phylogenetics — A Review · · · · · · · · · · · · · · · · · · ·	13
Raymond H. Chan, Roger Wei Wang, Hau Man Yeung	
Evaluating the Risk of Urban Redevelopment Viewed as a Social Decision Process	21
Saburo Saito, Mamoru Imanishi	
Three Kinds of Replacement Models Combined with Additive and Independent Damages · · · · · · · · · · · · · · · · · · ·	31
Xu-Feng Zhao, Mingchih Chen, Toshio Nakagawa	
Optimal Policies for a Generational Garbage Collector with Tenuring Threshold	39
Xu-Feng Zhao, Syouji Nakamura, Cun-Hua Qian	
Generalized Algorithm of Tchebyshev Scalarization for Set-Valued Maps Bing-Jiang Zhang	46
An Increasing-Mapping Approach to Integer Programming Based on Lexicographic Ordering and Linear Programming	55
Chuangyin Dang	
Value Chain Management Based on Open Innovation Strategy	61
Yuanzhi Chen	
Valuation of Derivative on Asset with Network Price Externality Effects	68
Yoshio Tabata, Hiroyasu Akakabe	
E-Convexity of the Optimal Value Function in Parametric Nonlinear Programming	75
Yu-Lan Liu, Hu-Nan Li	
Cone Quasi-convexity of Set-Valued Mappings in Topological Vector Spaces Hu-Nan Li, Yu-Lan Liu	83

Models and Algorithms for the Constrained Orienteering Problem 89 Zhenping Li, Rui-Sheng Wang, Hong-Wei Liu, Wenfeng Zhou
Leave-One-Out Bound for Crammer-Singer Multiclass Support Vector Machine 98
Yan-Mei Zhao, Zhi-Xia Yang
A Full-Newton Step Infeasible Interior-Point Algorithm for Linear Programming Based on a Special Self-Regular Proximity
A Study on Analyzing the Grid Road Network Patterns using Relative Neighbor-
hood Graph · · · · · · · · · · · · · · · · · · ·
Daisuke Watanabe
Tractability and Intractability of Problems on Unit Disk Graphs Parameterized by Domain Area · · · · · · · · · · · · · · · · · · ·
New Method for Basic Road Network Programming · · · · · · · · · 128
Xin-Wei Lu, Xiao Hu, Qun-Qi Wu
Two-stage Model of Vehicle Routing Problem with Fuzzy Demands and its Ant Colony System Algorithm
Yanwen Dong, Masatoshi Kitaoka
Shift-and-Merge Technique for the DP Solution of the Backpacker Problem · 144
Byungjun You, Takeo Yamada
Approximation Algorithms for the Multiply Constrained Assignment Problem 152
Daisuke Yokoya, Takeo Yamada
Multiple Instance Learning via Multiple Kernel Learning
Bing Yang, Qian Li, Ling Jing, Ling Zhen
A Resource Allocation Mode Based on DEA Models and Elasticity Analysis · 168
Qia Wang, Jin-Chuan Cui
Modeling Risk Control Problems in VE under Complicated Situations and Its Solution Method
Min Huang, Yanli Huo, Chunhui Xu, Xingwei Wang
Constant Time Generation of Trees with Degree Bounds $\cdots \cdots \cdots \cdots 183$
Bingbing Zhuang, Hiroshi Nagamochi
A Public Patentee's Technology Transfer under a Leadership Structure · · · 195 Takeshi Ebina, Shin Kishimoto
•
Staffing Model for Scheduling Simultaneous Interpreters under Tight Constraints 204 Sydney C.K. Chu
Optimal Stopping Rules of Discrete-Time Callable Financial Commodities with Two Stopping Boundaries
Kimitoshi Sato, Katsushige Sawaki, Hiroyuki Wakinaga

Contents vii

A Linear Time Algorithm for Edge Searching on 3-Cycle-Disjoint Graphs · · · 225 Boting Yang, Runtao Zhang, Yi Cao	5
Structural Properties for Job Shop Scheduling with Setups in a Local Search Environment	3
Equivalence between Generalized Saddle Point and Sun-point · · · · · · · · · · · · · · · · · · ·	1
A Solution Method for Manpower Scheduling Problems by RCPSP/τ · · · · · 249 Masanori Horio, Atsuo Suzuki	9
Determining Storage Locations and Capacities for Emergency Response · · · 262 Jianming Zhu, Degang Liu, Jun Huang, Jiye Han	2
Global Convergence of the Non-Quasi-Newton Method with Non-Monotone Line Search for Unconstrained Optimization Problem • • • • • • • • • • • • • • • • • • •	0
Optimum Design of Storage Cycle Time Analysis using Queueing Theory and Taguchi Method for a Conveyor and a Rotary Rac	0
An Optimal Investment Policy in Equity-Debt Financed Firms with Finite Maturities	8
Callable Russian Options with the Finite Maturity	6
A Row-and-Column Generation Method to a Batch Machine Scheduling Prob- lem · · · · · · · · · · · · · · · · · · ·	1
Gongshu Wang, Lixin Tang Community Extraction in Hypergraphs Based on Adjacent Numbers · · · · · 309 Hiroyuki Miyagawa, Maiko Shigeno, Satoshi Takahashi, Mingchao Zhang	9
Survey on the Variations and Applications of Nonnegative Matrix Factorization 317 Zhong-Yuan Zhang, Jie Zhang	7
A Maximal Covering Model for Helicopter Emergency Medical Systems · · · 324 Takehiro Furuta, Ken-ichi Tanaka	4
Locating Flow Capturing Facilities on A Railway Network with Two Levels of Coverage	2
Effect of Ambulance Station Locations and Number of Ambulances to the Quality of the Emergency Service	0
Polyhedral Split Decomposition of Tropical Polytopes for Directed Distances 348 Shungo Koichi	8

Management of Storage Devices and File Formats in Web Archive Systems · · 3: Hiroyuki Kawano	56
A New Descriptor for 3D Trajectory Recognition	62
Performance Analysis of Sensor Nodes in a WSN With Sleep/Wakeup Protocol 3' Wuyi Yue, Qingtian Sun, Shunfu Jin	70
Nonlinear Dynamics in COMEX Gold Futures Basis: LSTAR-EGARCH · · · 3' Chong Chen, Shan-Ying Xu	78
A New Approach for Scheduling Problem in Multi-Hop Sensor Networks · · · 38 Takamori Ukai, Mihiro Sasaki, Fumio Ishizaki, Atsuo Suzuki	86
Analysis of Toll Setting for Japanese Highway Networks Based on Social Optimization	94
Equitable Δ-Coloring of Planar Graphs without 4-cycles · · · · · · · · · · · · · · · · · · ·	00
Decision Support System for Skin Cancer Diagnosis	06
Mathematical Model and Solving Method Based on Software for the Shortest Time Limited Transportation Problem	14
An Optimization Model for Fuzzy Binary Clustering · · · · · · · · · 4. Xianwen Ren, Yong Wang, Jiguang Wang, Xiang-Sun Zhang	22
Multiple Instance Twin Support Vector Machines	33
Factors to Determine the Length of Staying Time of Consumer Shop-around (Kaiyu) at City Center	
Comparing Total Time Allocation to Travel to Daily Shopping Sites in Shanghai and Beijing	53
Saburo Saito, Masakuni Iwami, Xiaonan Chu Feature Selection in Multi-instance Learning	62
Proposition of New Network DEA Models Based on the Unified DEA Model · 4' Tohru Ueda, Hirofumi Amatatsu	70
Analysis of Two-server Queues with a Variant Vacation Policy · · · · · · · · 48 Dequan Yue, Wuyi Yue, Ruiling Tian	83

<u>Contents</u> ix

On Resolution Limit of the Modularity in Community Detection Junhua Zhang, Xiang-Sun Zhang	492
Little's Formula and Parking Space Policy Viewed from Consumers' Parking Behaviors at City Center Retail Environment	_
Perfect Sorting by Reversals and Deletions/Insertions	512
DEA with Weight Constraints for Evaluation of Work Safety Supervision Ji-Bin Qu, Ling-Yun Wu, Xiaoping Liao, Yushu Xie, Bingxue Song, Guiying Yan	519
Optimal Production-Inventory Policy under Energy Buy-Back Program Xiao-Song Ding, Ji-Hong Zhang, Xi Chen, Wei Shi	526
Author Index	533