

International Journal of Modeling and Optimization

CONTENTS

Volume 9, Number 5, October 2019

• System Modeling Method

A Model for Estimating Bike-Lane Demand..... 238
Aadarsh Vadakattu, Mohammad Amin Kuhail, and Harish Tata

New 5-DOF Industrial Robot Structure, Modeled and Optimized by the Finite Element Method 246
N. Mihai

Measurement of the Micro-asperities of the Asphalt Carpet Flat Surface by Means of Virtual Instrumentation
..... 250
Ștefan Ioniță, Corneliu Hagiescu, Ștefan Velicu, and Ionel Păunescu

Design of the Mechatronic Systems Used for Improving the Efficiency of the Solar Energy Conversion Devices
..... 254
Cătălin Alexandru

• Performance Optimization and Analysis

Virtual Instrumentation in the Robot's Kinematics Velocities Analyze 259
Adrian D. Olaru, Serban A. Olaru, Niculae C. Mihai, and Natalia M. Smidova

Method for Holistic Optimization of the Manufacturing Process 265
Cezarina Afteni, Gabriel Frumușanu and Alexandru Epureanu

Versatile Intelligent Portable Robot Platform Developed through Adaptive Neuro-Fuzzy Control..... 271
*Luige Vladareanu, Victor Vladareanu, Hongbo Wang, Yongfei Feng, Mihai Radulescu, and
Alexandra-Catalina Ciocîrla*

Air Cushion Robots Ground Testing Bed Experiments and Control Algorithm for Autonomous Rendezvous and
Docking 277
*Achim Ioniță, Dragoș Daniel Guță, Thien Van Nguyen, Andrei Lungoci, Ștefan Stoian, and Sandra Elena
Nichifor*

Nonlinear Fault-Tolerant Trajectory Tracking Control of a Quadrotor UAV 285
Seyyed Ali Emami and Afshin Banazadeh

Vision of INCDMTM Bucharest in RDI for the Smart Domain “Internet of Things –IoT”, Integrated in the
COBOT Technology Platforms 291
Gheorghe I. Gheorghe

