International Journal of Mechanical Engineering and Robotics Research

CONTENTS

Volume 5, Number 3, July 2016

Materials Science

Effects of Surface Modification on Improvement of Diamond Coating on Tungsten Carbide Cutting Tool.....168
Chii-Ruey Lin, Minh-Khoa Bendao, and Chi-Wen Liou

Morphological Studies on Europium Selenide Thin Films.....172
G. D. Bagde, C. T. Londhe, and K. N. Shivalkar

Characterization, Analysis and Modeling of a MEMS Based Nitinolactuator.....176
Alkausil Tamboli and A. Vimala Juliet

The Design and Development Technology of Robot

Design and Implementation of a Path Finding Robot Using Flood Fill Algorithm.....180
Semuil Tjiharjadi and Erwin Setiawan

Fuzzy Logic PID Based Control Design for a Small Underwater Robot with Minimum Energy Consumption 186
Ali Jebelli and Mustapha C. E. Yagoub

3D Map Building Using Mobile Robot with Scan Device.....191
Shohei Kita Jae Hoon Lee and Shingo Okamoto

Development of a Biped Walking Robot with Antagonistic Actuation.....196
Takashige Yano, Jae Hoon Lee, and Shingo Okamoto

Aerospace Engineering and Electronic Technology

Calculation of Turn Radius and Bank Angle at Different Altitudes Based on RNP AR.....202
Ozlem Sahin

Energy and Exergy (ENEX) Analyses of a MD-80 Aircraft.....206
Onder Turan

Mechanical Engineering and Application

Technology of WAVE and Feature Cutter Volume of Manufacturing.....210
Liu Jialiang, Chen Zhuoning, Xu Tongming, and Zhang Fen

Ergonomics Design Procedure for Female Urination Device in Computer System.....217
Lijing Wang and Xueli He

Influence of Module and Pressure Angle on Contact Stresses in Spur Gears.....224
M. V. Murali and S. L Ajit Prasad

Heat Transfer Analysis of Fins with Spine Geometry Using Differential Transform Method 229
Melih Fidanoglu, Guven Komurgoz, and Ibrahim Ozkol

A System and Method of Maneuvering Powered Exoskeleton Using Mechanical and Hydraulic Feedback 234
M. K. Vimal Govind, K. Padmakumar, and E. B. Sreejith Babu