

International Journal of Materials, Mechanics and Manufacturing CONTENTS

Volume 6, Number 2, April 2018

• Mechanical Design and Process Optimization

- Electrochemical Micro-Machining Process Parameter Optimization Using a Neural Network-Genetic Algorithm Based Approach.....82
Pan Zou, Manik Rajora, Mingyou Ma, Hungyi Chen, Wenchieh Wu, and Steven Y. Liang
- Effect of Cusp Size, Depth and Direction on Stress Concentration.....88
Md Shams E. Tabriz and Simon Barrans
- Dental Restorations of Co-Cr Using Direct Metal Laser Sintering Process.....93
Diana-Irinel Băilă
- A Method to Determine Cutting Force Coefficients in Turning Using Mechanistic Approach.....99
T. C. Bera, H. Manikandan, A. Bansal, and D. Nema
- A Minimum Machining Cost Approach for Automated Tolerance Assignment in Concentricity Control.....104
Chun-Wei R. Lin and Yuh-Jiuan M. Parng
- A Simulation Study on the Flow Effectiveness of DBR Scheduling.....109
Hornng-Chyi Hornng and Kuo-Kai Chien
- Joining Thin Sheet Aluminum Using Mechanical Clinching Process.....114
Zamzuri Hamedon, Mohd Nor Fikry Jamaluddin, and Muhammad Nafis Osman Zahid
- Ultra-High-speed Micro Machined Surface Integrity of Plastic Strain in Magnetic Abrasive Machining.....118
Rui Wang, Joo Hyun Park, Lida Heng, Jae Won Choi, and Sang Don Mun
- Formability of Cryorolled Aluminum Alloy Sheets in Warm Forming.....123
D. Raja Satish, Fitsum T. Feyissa, and D. Ravi Kumar
- Experimental investigation of Robotic Surface Finishing Using Abrasive Disc.....127
S. N. Padmanabhan, Z. Halil, Y. Sun, T. T. Vu, S. H. Yeo, and A. Wee
- ### • Mechanical Engineering and Manufacturing System
- Design of an Automated Mobile Rack Using Repetitive Control Method.....131
Hwanseong Kim, Yunsu Ha, and Kyoungmi Cheon
- The Rise of Smart Factories in the Fourth Industrial Revolution and Its Impacts on the Textile Industry.....136
Ömer Faruk G ör çin
- New Metallic Alloys Used for Dental Implants Manufacturing.....142
Diana-Irinel Băilă
- Vibration Response Characteristics Analysis and Experimental Verification of Thin-Walled Structure under Thermal-Acoustic Excitation.....147

Yundong Sha, Jian Wang, and Song Xiang

Building the Machining System Database for Matching Supplier and Customer.....151

Hoai-Nam Dinh and Shang-Liang Chen

• **Design and Test of Concrete Structure**

Effect of Different Aluminium Powder Content on the Behaviour of Aerated Concrete: Experimental and Finite Element Validation.....155

Rana Shabbar, Paul Nedwell, Mohammed Al-Tae, and Zhangjian Wu