

Table of Contents

Preface

Identification of Vibration Parameters of Mechanical System Utilizing Low-Cost MEMS Accelerometers	
K.D. Quang, H.V. Thi and A.L. Van	1
Development of 3D Printable Bone Model with Fracture Lines for Additive Manufacturing Applications	
Y.W. Tseng, C.Y. Liao, I. Irwansyah and J.Y. Lai	9
Studies on Pest Identification by Ultrasound	
M. Okuguno	15
Application of Diamond Fly Cutting to Improve Form Accuracy by In-Process Measurement and Control for Ordinary Milling Machines	
J.H. Wang, T. Yazawa, G.C. Gu, T. Kato and T. Otsubo	21
A Semi-Active Controller for an Aircraft Landing Gear Equipped with Magnetorheological Damper	
L.Q. Viet and J.H. Hwang	29
A Novel Rotor Profile Generation Method for Claw-Type Vacuum Pumps Based on Sealing Line	
T.L. Nguyen and Y.R. Wu	34
Force Analysis for a Variable-Pitch Rotor Meshing Pair in Twin-Screw Vacuum Pump Generating on CNC Turning Machine	
V.T. Tran, T.L. Le and H.L. Nguyen	41
A Study on Active Closed-Loop Gap Control for Hydrostatic Bearing	
J.C. Renn and G.Y. Wu	51
Development and Analysis for a New Compliant XY Micropositioning Stage Applied for Nanoindentation Tester System	
M.P. Dang, T.P. Dao, H.G. Le and N.T. Tran	60
Performance Characteristics of Small Diesel DI Engine Using Different Geometry Intake Parts	
L.V. Hung, D.V. Dung, A.T. Nguyen and L.H. Giang	72
Analysis and Experimental Design of Damper System and Cutting Parameters of CNC Router	
V.T. Tran, N.H. Loc and H.H. Nguyen	82
A Best Practice Guideline for Inspecting Precision Machined Parts by Using Several Coordinate Measuring Machines (CMMs)	
P. Phimpisan and C. Chungchoo	90
Research on Application of 3D Parametric Software for Design and Shaping of Bus Frame Structure	
T.C. NGUYEN	96
Numerical Study of a Small Droplet Movement in a Microchannel under Heat Source	
T.L. Le, J.C. Chen and H.B. Nguyen	104
The Effect of the Different Inlet's Structures of the Gas-Liquid Cylindrical Cyclone (GLCC) Separator	
M.K. Ho, T.N. Nguyen, P. Nguyen Ngoc and V. Tuyen	112
Research on the Establishing of the Control System of the SIS Rapid Prototyping Machine	
T.N. Nguyen, L.K. Dien and S. Antonov	126
A Research on the Design a Bamboo Powder Drying Machine	
T.V. Hung, L.K. Dien and V. Tuyen	133
Research on the Design of the Laser Beam in SLS Rapid Prototyping Machine	
V. Tuyen, T.N. Nguyen and K.D. Le	140
Advanced Sensor-Less Control of IPMSM Motor Using Adaptive Neural FOC Approach	
P.Q. Khanh, H.P.H. Anh and C.V. Kien	149
Evaluation Method for Friction Coefficient of Machining Fluids Using Cutting Force in Micro Feed End Milling	
T. Kitamura, R. Tanaka, Y. Yamane, K. Sekiya and K. Yamada	158

