

4421-1337

International Journal of
**ADVANCES IN MECHANICAL
ENGINEERING**

Volume 4

Number 2

July-December 2014



Research Science Press (India)

LIBRARY NO. 004
DATE: 28/11/15

International Journal of ADVANCES IN MECHANICAL ENGINEERING

VOLUME 4

NUMBER 2

JULY-DECEMBER 2014

CONTENTS

Real-time Ultrasonic Rail Health Monitoring System for Both Heavy Haul Loads and High Speed Train – South Africa Overview	<i>Bohua Sun & Nawaz Mahomed</i>	61-65
Numerical Simulation of Viscoelastic Flows in A Flat Slit Channel	<i>Yong Li, Jianrong Zheng & Xinling Ma</i>	67-79
Extended Krauss Deformation Gradient Decomposition of Single Director Shells made of Elaso-plastic Materials	<i>Bohua Sun</i>	81-90
Behavioural Analysis of Fiber Optical Sensor Beam Targeted to a Flat Surface with Various Texture	<i>Frumence E Utou & Bohua Sun</i>	91-96
The Calculation Analysis of Different Mortar Materials on the Mechanical Properties of the Grouting Strengthening Masonry Structureg	<i>Shi Jianguang, Deng Hua & Ye Zhiming</i>	97-105
Smart Enhanced Assumed Strain Element of Smart Laminated Plates	<i>Bohua Sun</i>	107-110
Uncooled Infrared Imaging Micro-cantilever Pixel Bi-material Structure with Optical Readout	<i>Bohua Sun</i>	111-114
Waveguide Gyro	<i>Bohua Sun</i>	115-118
Buckling Theory of Elastic Continua with Isotropic Damage	<i>Bohua Sun</i>	119-130
The Effect of Damage Location on the Performance of Composite Cantilever Beams	<i>J E N Oliveira & Bohua Sun</i>	131-135
Modeling a Piezoelectrically Actuated Planar Capacitor Actuator Membrane	<i>Oliver J. Myers M. Anjanappa & Carl B. Freidhoff</i>	137-152
Molecular Dynamics Simulation for Clusters of Copper Atoms in Fe-Cu Alloy under Radiation	<i>Jianwei Wang Xinchun Shang & Guocai Lv</i>	153-156