

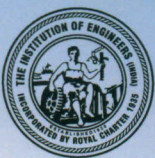
Journal of The Institution of Engineers (India): Series C

Mechanical Engineering · Production Engineering · Aerospace Engineering ·
Marine Engineering



LB 03/05/2023

For Circulation in India only



The Institution of Engineers (India)

 Springer

Journal of The Institution of Engineers (India): Series C

Volume 104 · Issue 2 · April 2023

ORIGINAL CONTRIBUTIONS

Assessment of Effectiveness Amount of Heat Absorption/Production and Magnetic Field on Entropy Generation During Conjugate Heat Transfer of Hybrid Nanofluid

M. Nemati · S.D. Farahani · H.M. Sani 231

Design and Development of Smart Helmet

S.S. Kanase · S.N. Teli · S.D. Jadhav · J.S. Patil · T.S. Kanase · A.S. Pawar 253

Experimental and Finite Element Analyses for High-Speed Machining of AISI 4340 steel with ZTA Insert

S. Mazumder · K. Ghosh · B.K. Singh · S.S. Chakraborty · N. Mandal 261

Frequency Analysis of Variable Thickness Kirchhoff Plates by Isogeometric Approach

G.P. Sinha · B. Kumar 271

Influence of 2–10 wt% of SMA Nitinol Reinforcement on the Mechanical Properties of Glass–Epoxy Composites Manufactured Through the VARTM Process

T. Nallusamy · N. Dhanush · S. Kavya 281

On Dy⁺³ Nobbled ZnO-Reinforced PVDF for Flexible Optical Sensor

R. Kumar · R. Singh · V. Kumar · P. Kumar · N. Ranjan 291

Prediction of Anthropometric Dimensions Using Multiple Linear Regression and Artificial Neural Network Models

D.R. Zanwar · H.D. Zanwar · H.M. Shukla · A.A. Deshpande 307

Prediction of WEDM Performances Using Clustering Techniques in ANFIS During Machining of A286 Superalloy

S. Saha · S.R. Maity · S. Dey 315

Quantitative Analysis of Energy Efficiency and Determination of Optimal Operating Mode for Marine Gas–Electric Hybrid Power System

Q. Yang · X. Sun · C. Yao · Z. Liu · E. Song 327

Research on Human Resource Allocation of Vulnerable Groups in Enterprises Based on a Resource Scheduling Algorithm

X. Chen 339

Surface Roughness Modeling and Prediction Based on Vibration Signal Analysis and Machining Parameters in Milling of Aluminum by Artificial Neural Network

S.A. Abdelwahab 345

Thermodynamic and Environmental Assessment of Low-GWP Alternative Refrigerants for Domestic Cooling

Md.A. Islam · T.H. Rupam · S. Hosan · B.B. Saha 377

Ultimate Strength Analysis of Plates with a Square Opening

A.R. Ranji · S. Alirezaee 385

Vibration Analysis of the Base Structure Supporting a Centrifuge–Motor Assembly in a Petroleum Oil Refinery

A.K. Devaraj · R. Adhikari 393

CASE STUDY

Human-Centered Design (HCD) of Rural Cooking Stove

M. Arunachalam · D.K. Patel 403

Influence of Nano-Clay and Strain Rate on the In-Plane Compression Response of Nano-Clay/AA3003 Honeycomb Sandwich Panels

P.V. Prasanth · M.E.S. Raj · R.S. Jayaram · S.S. Murugan 419

REVIEW PAPERS

A Review on Vibrations in Electric and Hybrid Electric Vehicles

K. Krishna · G.T. Mahesha · S. Hegde · B. Satish Shenoy 423

Feeding Mechanisms in the Auto-Body Stamping Production Line: A Review of Common Research

L. Yu 439

Creating Value for Reliability Centered Maintenance (RCM) in Ship Machinery Maintenance from BIG Data and Artificial Intelligence

U.S. Kalghatgi 449

Instructions for Authors for *J. Inst. Eng. India Ser. C* are available at <http://www.springer.com/40032>

Transient Deformation of an Anisotropic Cylindrical Shell with Structural Features

N.A. Lokteva · D.O. Serdyuk · P.D. Skopintsev 455