

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

Volume 103 · Issue 5 · October 2022

ORIGINAL CONTRIBUTIONS

A Study of Tensile Characteristics for Glass and Carbon Fiber Along with Sandwiched Reinforced ABS Composites

V.A. Radadiya · A.H. Gandhi 1049

An Experimental-Numerical Investigation for Layer-Wise-Heat-Input Management in GMA-Based Additive Manufacturing

S. Srivastava · R.K. Garg · A. Sachdeva · V.S. Sharma · S. Singh 1059

Blind-Spot Monitoring System using Lidar

K.S. Pawar · S.N. Teli · P. Shetye · S. Shetty · V. Satam · A. Sahani 1071

Calibrating a Synthesized 3-PRS Manipulator by Minimizing the Errors in Positions of Revolute Joints

P.S. Rao 1083

Designing Engineering Solutions to Surgical Problems: How to Translate Physiology to Biomechanics

O.B. Benyamin · D. Juvinao · T. Berlinsky · A. Salih · E. Solomonov · I. Waksman · S. Biswas 1095

Development and Characterization of Cu-Al₂O₃ Nanocomposite Coating using Electrodeposition Process on Copper Substrate

A. Mogra · P.K. Pandey · K.K. Gupta · S. Shivhare · V. Bagal 1103

Eco-Friendly Machining of Ti-6Al-4V Alloy: Optimization Using a Hybrid Algorithm (Grey Wolf Algorithm and VIKOR Algorithm)

V.V.K. Lakshmi · K.V. Subbaiah · K.A. Vikram · Shabana · K. Suresh · R.D.V. Prasad 1111

Evaluation of the Efficacy in Ergonomically Designed Handsaw to Minimize the Muscular Load on Arm and Shoulder Muscles among Carpenters

R. Naveenkumar · S. Shankar · R. Nithyaprakash · D. Hariprasath · G. Moulidaman · C. Prakash 1125

Improvement in Ride Comfort and Vehicle Stability using Hybrid Semi-Active Suspension System

J. Kumar · G. Bhushan 1133

Influence of Particle Size on Microstructure and Sliding Wear Response of Fly Ash and Rice Husk Ash Reinforced Al6061 MMCs

S.S. Panda · A.K. Senapati · P.S. Rao 1143

Investigation of the Performance of a 660-MW Supercritical Boiler in Terms of NO_x Emission and Enhancing the Thermal Efficiency by Optimizing the Air Distribution System

N.K. Gavirineni · E. Gundabattini 1155

Machinability Aspects of Nano MMT Deposited GFRP Composites to Minimize the Drilling Induced Delaminations

S.R. Juvvala · K.R. Chebattina · V.S.N. Venkata Ramana · D. Bommana · U.C. Pathem 1169

Microstructural, Strength and Residual Stress Studies on Single- and Double-Side Single-Pass Submerged Arc Welding of 9Cr-1Mo-V Steel Plate

S. Suman · P. Biswas 1177

Microstructural Study and Mechanical Characterization of ECAP Processed C70600 Alloy

S. Sachin · H.S. Nayaka 1193

Natural Convection Inside a Square Enclosure with an Array of Cylinders of Different Geometrical Configurations

S. Pati · N. Goswami · D. Bhattacharya · P. Kalita · P.R. Randive 1203

Network-of-Things (NoT) in Avionic Systems

S. Sreedharan Pillai · B. Varghese · S. Sankarattil · V. Padmanabha Rao · M.N. Namboodiripad 1217

Study of the Polishing Performance of YAG Crystals through the Balance between Chemical and Mechanical Actions

N.M. Quang · N.T. Tung · L.T.P. Thanh 1223

Study on the Cost Control of Enterprise Activity Chain Based on Big Data

X. Wang 1235

Suitable CFRP Patches to Arrest Crack Growth in Thin Alloy Aluminium Panels

H.P. Shinde · P. Kumar · M.G. Karnik · S.D. Shinde 1243

**Transition to Electric Mobility in India: Barriers
Exploration and Pathways to Powertrain Shift through
MCDM Approach**

B. Ashok · C. Kannan · K.M. Usman · R. Vignesh ·
C. Deepak · R. Ramesh · T.M.V. Narendhra ·
C. Kavitha · 1251

CASE STUDY

**Experimental Analysis of Modified Refrigeration Air
Dryer for Performance Improvement**

D.C. Gosai · A.K. Gillawat · S.M. Raj · 1279

REVIEW PAPERS

**3D Printing of Glass Fiber-Reinforced Polymeric
Composites: A Review**

K. Badogu · R. Kumar · R. Kumar · 1285

**Bone Tissue Regeneration: Rapid Prototyping
Technology in Scaffold Design**

A.I. Ansari · N.A. Sheikh · 1303

**Processing Techniques, Microstructural and
Mechanical Properties of Wire Arc Additive
Manufactured Stainless Steel: A Review**

S.K. Sharma · C. Sharma · 1325

ARTICLE OF PROFESSIONAL INTEREST

**Flare Piping Material Selection for the Offshore Oil
and Gas Industry**

K. Sotoodeh · 1341

Further articles can be found at link.springer.com

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