

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

Volume 102 · Issue 5 · October 2021

ORIGINAL CONTRIBUTIONS

Buckling and Free Vibration of Porous Functionally Graded Metal Ceramic Beams under Thermal and Mechanical Loading: A Comparative Study

H.B. Patil · J. Pitchaimani ·

L.B. Mailan Chinnapandi 1107

Design of Pelvic Prosthesis using Topology Optimization for Loads in Running Gait Cycle

K.E.S. Kumar · S. Rakshit 1119

Design and Implementation of Water Sprinkler System for Emergency Diesel Generator at Full Load in Nuclear Power Plant

K. Swamynathan · K. Karthikeyan 1129

Dynamic Analysis of Working Device of Excavator under Limit Digging Force

X. Wang · H. Sun · M. Feng · Z. Ren · J. Liu 1137

Estimation of Damping Force of double Ended Magnetorheological Damper through one way coupled CFD and FEA Analysis

T.M. Gurubasavaraju 1145

Exergo-Economic Study of SOFC-Intercooled and Reheat type GT-VARS-ORC Combined Power and Cooling System

P. Kumar · O. Singh 1153

Finite Element-based Free Vibration Analysis of Power-Law, Exponential and Sigmoidal Functionally Graded Sandwich Beams

A. Garg · H.D. Chalak · M.-O. Belarbi · A. Chakrabarti ·

M.-S.-A. Houari 1167

Fire Path Analysis of Vehicle: To Prevent Vehicle Fire Incidents at Early Stages of Vehicle Design

G. Dahibhate · T. Dhamal · D. Sahu · R. Gharat 1203

Fusion between Full Consistency Method and Ideal Solutions with Constraint on Values for Material Selection: A Consilient Conspectus Approach

M.C. Das · B. Sarkar 1211

Influence of Trapezoidal Shapes and Linearly varying Edge Loads on the Buckling Characteristics of Plates with Cutouts

M. Ranjere · T. Rajanna · B. Arya 1231

Mixing Performance Analysis of Producer Gas Carburetors for a Dual Fuel CI Engine

S. Suryawanshi · R. Yarasu 1251

Performance Studies on Solar Air Heater with Staggered Open Channel Aluminium Turbulators

P. Selvakumar · J.J. Anson · V. Harish ·

T.K. Gulshan 1261

Photo-Voltaic/Thermal Hybrid Solar Collector

T. Singh · A. Dhingra 1267

Ranking Welding Processes for SS 304 to Maximize the Ultimate Tensile Joint Strength using AHP:

A Benchmarking Study

A. Pandey · R. Shringi 1273

Study on Stepped-Type Basin Solar Still and Analytical Validation Using RSM

A. Alaudeen · K. Velmanirajan · A.S.A. Thaheer 1285

The Potential of Heat Recovery for Air-Conditioning in Sugar Industry

D.B. Uphade 1299

REVIEW PAPER

An Oscillating Water Column (OWC): The Wave Energy Converter

S. Kushwah 1311

CORRECTION

Correction to: Treatments of Micro-channel Flows Revisited: Continuum Versus Rarified Gas Considerations

F. Durst · D. Filimonov · R. Sambasivam 1319

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>