



ORIGINAL CONTRIBUTIONS

- A Novel PCM Cold Energy Storage System for Reducing the Power Consumption of Air-Conditioning Unit and Shifting the Daily Energy Peaks to Off-peak Hours**
P.N. Reddy · P.R. Ganji · T.N. Suri 673
- A Stratified Multivariate Statistical Approach for Monitoring a Steel Manufacturing Facility**
S. Suman · A. Das · A. Kumar · A. Kumar 681
- An Empirical Study on Information Flow Analysis Through Supply Chain Value Stream Mapping in an Automotive Industry**
S. Murali · M. Balasubramanian · R.S. Kumar 695
- An Innovative Application of Piezoelectric Patch for the Measurement of Modulus of Elasticity**
G. Roy · G. Pohit 705
- An Optimization-Based Approach for Redundancy Resolution of Spatial Robots in Realistic Working Environments**
V.V.M.J.S. Chembuly · H.K. Voruganti 715
- Analysis of Flow of Viscoelastic Abrasive Medium and Finishing Forces in Two-Way AFM**
G.S. Mangesh · A. Misra 733
- Determine the Rheological Parameters for Characterization of Semi Solid Slurry of ADC12 Al Alloy**
S.K. Gautam · A. Rajak · A. Khalkho · S.K. Samanta 743
- Friction Stir Processing of Multiwalled Carbon Nanotubes Reinforced Al-Mg-Si Alloy Composites**
P. Singh · A. Sahai · R.S. Sharma 749
- Influence of Blockage on the Dynamic Characteristics of a Fluid Conveying Aluminium Tube**
K. Sayooj · M.A. Raza · M. Unnikrishnan 767
- Machine Learning-Based Prediction of Electrical Discharge Initiation Time for Static and Dynamic Nature of Dielectrics in EDM**
D. Das · D. Nandi · I. Basak · A. Manna 779
- Master Ply Concept Using Invariant-Based Design Approach for Fused Deposition Modeling Material**
R.M. Patel · C.K. Desai 789
- Mechanical and Microstructure Behavior of Cladding Surface SS-304 Coating with Ni and Al₂O₃ by Microwave Technique**
S.P. Dywivedi · M. Maurya · S. Sharma 797
- Modeling Elastic Wave Propagation in Fiber-Reinforced Media Using Lagrange Spectral Element Method**
P. Saini 805
- Numerical Analysis of Hot Extrusion Deformation of B₄C/6061Al Composites**
Y. Cao · J. Du · B. Wang · L. Zhou 815
- Precursor-Dependent Formation of Iron Pyrite and its Application as Supercapacitor Electrode Material**
S. Shit · P. Samanta · N.C. Murmu · P. Khanra · T. Kuila 829
- Self-assembled Nano-BiFeO₃ Chemi-resistive VOC Sensor: A Non-conventional MOS Sensor Highly Selective toward Acetone**
S. Neogi · N. Mandal · R. Ghosh 839
- Studies on Vapor Compression System Cascaded to the Ammonia Vapor Absorption System for Deep Freezing Application**
K. Bhuvaneshwaran · P.K. Govindasamy · S. Rajagopal 845
- Thermodynamic Analysis of a Compression-Driven Adsorption-Based Cooling System Using CO₂ as the Refrigerant**
G. Kumar · S. Sahoo 853

REVIEW PAPER

- Modeling and Simulation of Scaffolds in Varied Conditions Using CAD and Medical Images**
A.I. Ansari · N.A. Sheikh 861

ARTICLE OF PROFESSIONAL INTEREST

- The Mathematical Analysis and Review of Water Hammering in Check Valves in Offshore Industry**
K. Sotoodeh 879

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>