

# Table of Contents

## International Journal of Manufacturing, Materials, and Mechanical Engineering

Volume 11 • Issue 3 • July-September-2021 • ISSN: 2156-1680 • eISSN: 2156-1672

### Research Articles

- 1      **Strength Optimization of Infant Pop-Up Seat Frame Using Discrete Material and Thickness Optimization**  
YeongJo Ju, Kongju National University, South Korea  
Euysik Jeon, Kongju National University, South Korea
- 21     **Battery Management for Small Hydroponic Systems and Cultivation Experiments**  
Satoru Yamaguchi, Kanagawa Institute of Technology, Japan  
Takuya Motosugi, Kanagawa Institute of Technology, Japan  
Yoshihiko Takahashi, Kanagawa Institute of Technology, Japan
- 37     **Dynamic Analysis and Simulation of the Hydraulic Control System on the Remote-Controlled Explosive Ordnance Disposal Machine**  
Dat Duy Nguyen, Le Quy Don Technical University, Vietnam  
Dat Van Chu, Le Quy Don Technical University, Vietnam  
Le Van Sy, Petrovietnam University, Vietnam
- 55     **Classification and Automatic Feature-Based Extraction Approach for Cylindrical and Milling Parts**  
Sathish Kumar Adapa, Aditya Institute of Technology and Management, India  
Dowluru Sreeramulu, Aditya Institute of Technology and Management, India  
Jagadish, National Institute of Technology, Raipur, India
- 74     **Turning SKD 11 Steel Using Silver Nanofluids With Minimum Quantity Lubrication**  
M. Naresh Babu, Easwari Engineering College, Chennai, India  
V. Anandan, Saveetha Engineering College, Chennai, India  
M. Dinesh Babu, Panimalar Engineering College, Chennai, India  
N. Muthukrishnan, Sri Venkateswara College of Engineering, India

### COPYRIGHT

The **International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME)** (ISSN 2156-1680; eISSN 2156-1672), Copyright © 2021 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The *International Journal of Manufacturing, Materials, and Mechanical Engineering* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; DBLP; Google Scholar; INSPEC; JournalTOCs; MediaFinder; ProQuest Engineering Journals; ProQuest Illustrata: Technology; ProQuest Materials Science Journals; ProQuest SciTech Journals; ProQuest Technology Journals; SCOPUS; The Standard Periodical Directory; UGC-CARE List (India); Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)