

# Table of Contents

## International Journal of Grid and High Performance Computing

Volume 10 • Issue 1 • January-March-2018 • ISSN: 1938-0259 • eISSN: 1938-0267

*An official publication of the Information Resources Management Association*

### Research Articles

- 1     **Resource Allocation in Grid Computing Environment Using Genetic–Auction Based Algorithm**  
Kuppani Satish, Department of Computer Science and Engineering, Sri Venkateswara University, Tirupati, India  
A. Rama Mohan Reddy, Department of Computer Science and Engineering, Sri Venkateswara University, Tirupati, India
  
- 16    **A Power Monitoring System Based on a Multi-Component Power Model**  
Weiwei Lin, South China University of Technology, Guangzhou, China  
Haoyu Wang, South China University of Technology, Guangzhou, China  
Wentai Wu, South China University of Technology, Guangzhou, China
  
- 31    **An Enhanced Task Scheduling in Cloud Computing Based on Deadline-Aware Model**  
Mokhtar A. Alworafi, University of Mysore, Mysore, India  
Suresha Mallappa, University of Mysore, Mysore, India
  
- 54    **GPU Implementation of Image Convolution Using Sparse Model with Efficient Storage Format**  
Saira Banu Jamal Mohammed, VIT University, Vellore, India  
M. Rajasekhara Babu, VIT University, Vellore, India  
Sumithra Sriram, VIT University, Vellore, India
  
- 71    **Embarrassingly Parallel GPU Based Matrix Inversion Algorithm for Big Climate Data Assimilation**  
M. Varalakshmi, VIT University, Vellore, India  
Amit Parashuram Kesarkar, National Atmospheric Research Laboratory, Chittoor, India  
Daphne Lopez, VIT University, Vellore, India

### COPYRIGHT

The **International Journal of Grid and High Performance Computing (IJGHC)** (ISSN 1938-0259; eISSN 1938-0267), Copyright © 2018 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 Grid and High Performance Computing* is indexed or listed in the following: ACM Digital Library; Bacon's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); DBLP; GetCited; Google Scholar; INSPEC; JournalTOCs; MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)