

Table of Contents

Ternary Arithmetic Pipeline Architectures Using Multi-bit Memristors <i>Dietmar Fey</i>	1
Bringing Colours to the Black Box - A Novel Approach to Explaining Materials for Evolution-in-Materio <i>Dragana Laketic, Gunnar Tufte, Stefano Nichele, and Odd Rune Lykkebo</i>	7
Is There Chaos in Blobs of Carbon Nanotubes Used to Perform Computation? <i>Stefano Nichele, Dragana Laketic, Odd Rune Lykkebo, and Gunnar Tufte</i>	12
Specification and Verification of Garbage Collector by Java Modeling Language <i>Wenhui Sun, Yuting Sun, Zhifei Zhang, Jingpeng Tang, Kendall Nygard, and Damian Lampl</i>	18
From Personal Computers to Personal Computing Networks: A New Paradigm for Computation <i>Mark Burgin, Rao Mikkilineni, and Giovanni Morana</i>	24
Assessment of MVAR Injection in Power Optimization for a Hydrocarbon Industrial Plant Using a Genetic Algorithm <i>Mohammed Abido, Muhammad Al-Hajri, and Mohamed Darwish</i>	31
Chemistry-inspired, Context-Aware, and Autonomic Management System for Networked Objects <i>Mahmoud ElGammal and Mohamed ElToweissy</i>	38
An Approach to Model Resources Rationalisation in Hybrid Clouds through Users Activity Characterisation <i>Giovanni Battista Barone, Vania Boccia, Davide Bottalico, Rosanna Campagna, Luisa Carracciuolo, and Giuliano Laccetti</i>	48
Visualization Tool for Development of Communication Algorithms and a Case Study Using the K Computer <i>Syunji Yazaki, Ryohei Suzuki, Fumiyoshi Shoji, Kenichi Miura, and Hiroaki Ishihata</i>	54
Creating, Protecting and Sharing of Semantically-Enabled User-Orientated Electronic Laboratory Notebook in a Service Environment <i>Tahir Farooq and Zulkifly Mohd Zaki</i>	60