Table of Contents

A Second-Order Regularization Method of Object Reconstruction in Hydrodynamic Experiments Linghai Kong and Haibo Xu	1
Search Opportunities of Swarming Particles Methods in Irregular Multi-Extreme Environments Ivan Chernogorov, Rudolf Neydorf, and Dean Vucinic	7
Numerical Study for Unsteady Aerodynamics of Multi-Dimensional Freely Falling Plates or Thin Coins Changqiu Jin	13
Learning to Play Mastermind Well Using the Anti-Mind with Feeback Algorithm Jose Barahona da Fonseca	15
Improved Bi-optimal Hybrid Approximation Algorithm for Monochrome Multitone Image Processing Rudolf Neydorf, Albert Aghajanyan, and Dean Vucinic	20
Polynomial Optimization in Mathematical Models Defining Experimental Data Dependencies Rudolf Neydorf, Victor Poliakh, and Dean Vucinic	26
Optimal Design of Diffuser and Matching Lens in Proton Radiography Xu Haibo and Jia Qinggang	31
An Interactive Learning Tool for Teaching Sorting Algorithms Ahmad Qawasmeh, Zohair Obead, Mashal Tariq, Motaz Shamaileh, and Ahmad Shafee	34
Modbus-A: Automated Slave ID Allocation Enabling Architecture for Modbus Devices on RS485/232 Bharath Sudev, Iain Kinghorn, Dongbing Gu, and Doug Gower	39
Cyber-physical System Control via Industrial Protocol OPC UA Felix W. Baumann, Ulrich Odefey, Sebastian Hudert, Michael Falkenthal, and Michael Zimmermann	45
Automated Translation of MATLAB Code to C++ with Performance and Traceability Geir Yngve Paulsen, Stuart Clark, Bjorn Nordmoen, Sergey Nenakhov, Aron Andersson, Xing Cai, and Hans Petter Dahle	50
Third-order Time Integration Scheme for Structural Dynamics Eva Zupan and Dejan Zupan	56