

Contents

Mesh-Based Modeling of Individual Cells and Their Dynamics in Biological Fluids	1
Ivan Cimrak, Iveta Jancigova, Renata Tothova and Markus Gusenbauer	
Usage of Industrial Computed Tomography for Evaluation of Custom-Made Implants	29
Radovan Hudak, Jozef zivcak, Teodor Toth, Jaroslav Majernik and Martin Lisy	
Assessment of Mortality Risk for Patients Undergoing Colorectal Surgery Using Regression Modeling	47
Kateřina Janurova and Lubomir Martinek	
Profiling of Software Requirements for the Pharmaceutical Enterprise Manufacturing Execution System	67
Vyacheslav Kharchenko, Oleksandr Gordieiev and Alina Fedoseeva	
Application of Survival Analysis on Analysing the Association Between Chromosomal Aberrations and Carcinoma	93
Veronika Kubickova	
Modelling the Results of the Phadiatop Test Using the Logistic and Ordinal Regression	103
Pavlina Kuranova	
Complex Data Management in MRI Results Processing	119
Michal Kvet, Monika Vajsova and Karol Matiařko	
Biometrics for Biomedical Applications	143
Kenneth Lai, Steven Samoil, Svetlana N. Yanushkevich and Gaetan Collaud	

Multimedia Support of Medical Education Utilizing On-Line Archive of Video Lectures	163
Jaroslav Majerník and Pavol Jarčuška	
Evaluation of Postural Stability Using Motion Analysis Techniques . . .	175
Jaroslav Majerník and Jozef Živčák	
Some Issues on an Object-Oriented Programming Language for Physarum Machines	185
Krzysztof Pancierz and Andrew Schumann	
A Tool for Computer-Aided Diagnosis of Psychological Disorders Based on the MMPI Test: An Overview	201
Krzysztof Pancierz, Olga Mich, Andrzej Burda and Jerzy Gomuła	
The Instance and Feature Selection for Neural Network Based Diagnosis of Chronic Obstructive Bronchitis	215
Sergey Subbotin	
New Methods for the Reliability Analysis of Healthcare System Based on Application of Multi-State System	229
Elena Zaitseva, Vitaly Levashenko, Jozef Kostolny and Miroslav Kvassay	