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Soggetti	Artificial intelligence
	Data structures (Computer science)
	Information theory
	Image processing - Digital techniques
	Computer vision
	Bioinformatics
	Data mining
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Nota di contenuto	Image Acquisition and Analysis of Hazardous Biological Material in Air -- Geo-Thresholding for Segmentation of Fluorescent Microscopic Cell Images -- Image Segmentation by Non-topological Erosion and Topological Expansion -- Variability Analysis of the Large-Scale Structure of Interphase Chromatin Fiber Based on Statistical Shape Theory -- Image Segmentation Using Histogram Fitting and Spatial Information -- Statistical Analysis of Microspectroscopy Signals for

Algae Classification and Phylogenetic Comparison -- Semi-automatic Semantic Tagging of 3D Images from Pancreas Cells -- Combinatorial Synthesis of Thin Mixed Oxide-Films and Examinations of Their Piezoelectricity by Ultrasonic Piezo-Mode Imaging -- A Novel Image Feature for Nuclear-Phase Classification in High Content Screening -- Object Detection in Watershed Partitioned Gray-Level Images -- Finding Cells, Finding Molecules, Finding Patterns -- Automatic Fuzzy-neural Based Segmentation of Microscopic Cell Images -- Real-Time Measurement and Analysis of Translational and Rotational Speeds of Moving Objects in Microscope Fields -- A General Approach to Shape Characterization for Biomedical Problems -- Statistical Analysis of Electrophoresis Time Series for Improving Basecalling in DNA Sequencing -- Semi-automated Mapping of Cell Nuclei in 3D-Stacks from Optical-Sectioning Microscopy -- Statistical Analysis of Myocyte Orientations of the Left Ventricular Myocardium -- Automatic Quality Control of Cereals in Particular Wheat-Subtask Detection of Hygiene-Relevant Parameters.

| Sommario/riassunto | The automatic analysis of images and signals in medicine, biotechnology, and chemistry is a challenging and demanding field. Signal-producing procedures by microscopes, spectrometers, and other sensors have found their way into wide fields of medicine, biotechnology, economy, and environmental analysis. With this arises the problem of the automatic mass analysis of signal information. Signal-interpreting systems which generate automatically the desired target statements from the signals are therefore of compelling necessity. The continuation of mass analyses on the basis of classical procedures leads to investments of proportions that are not feasible. New procedures and system architectures are therefore required. The scope of the International Conference on Mass Data Analysis of Images and Signals in Medicine, Biotechnology and Chemistry MDA (www.mda-signals.de) is to bring together researchers, practitioners, and industry people who are dealing with mass analysis of images and signals to present and discuss recent research in these fields. The goals of this workshop are to: Provide a forum for identifying important contributions and opportunities for research on mass data analysis on microscopic images Promote the systematic study of how to apply automatic image analysis and interpretation procedures to that field Show case applications of mass data analysis in biology, medicine, and chemistry Topics of interest include (but are not limited to): Techniques and developments of signal and image producing procedures Object matching and object tracking in microscopic and video microscopic images 1D, 2D, and 3D shape analysis and description. |