

1. Record Nr.	UNISA996465319703316
Titolo	Mathematical Morphology and Its Application to Signal and Image Processing [[electronic resource]] : 9th International Symposium on Mathematical Morphology, ISMM 2009 Groningen, The Netherlands, August 24-27, 2009 Proceedings // edited by Michael H. F. Wilkinson, Jos B.T.M. Roerdink
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	3-642-03613-9
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (XI, 321 p.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 5720
Classificazione	DAT 760f ELT 515f SS 4800
Disciplina	004n/a
Soggetti	Bioinformatics Life sciences Signal processing Image processing Speech processing systems Animal anatomy Computer science—Mathematics Computational Biology/Bioinformatics Life Sciences, general Signal, Image and Speech Processing Animal Anatomy / Morphology / Histology Math Applications in Computer Science Discrete Mathematics in Computer Science Groningen (2009) Kongress.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Speaker -- Discrete Driver Assistance -- Theory -- The "False

Colour” Problem -- Bipolar Fuzzy Mathematical Morphology for Spatial Reasoning -- An Axiomatic Approach to Hyperconnectivity -- Hyperconnectivity, Attribute-Space Connectivity and Path Openings: Theoretical Relationships -- Connectivity and Connected Filters -- Constrained Connectivity and Transition Regions -- Surface-Area-Based Attribute Filtering in 3D -- Levelings and Geodesic Reconstructions -- A Comparison of Spatial Pattern Spectra -- Adaptive Morphology -- Differential Equations for Morphological Amoebas -- Spatially-Variant Anisotropic Morphological Filters Driven by Gradient Fields -- 3-D Extraction of Fibres from Microtomographic Images of Fibre-Reinforced Composite Materials -- Spatially-Variant Morpho-Hessian Filter: Efficient Implementation and Application -- Graphs and Topology -- Some Morphological Operators in Graph Spaces -- Morphology on Graphs and Minimum Spanning Trees -- Segmentation -- Segmentation of Complex Images Based on Component-Trees: Methodological Tools -- Ultrametric Watersheds -- An Efficient Morphological Active Surface Model for Volumetric Image Segmentation -- Shape -- Ultimate Attribute Opening Segmentation with Shape Information -- Hierarchical Shape Decomposition via Level Sets -- Morphological Exploration of Shape Spaces -- Morphology of Multi-valued Images -- From Scalar-Valued Images to Hypercomplex Representations and Derived Total Orderings for Morphological Operators -- A Directional Rouy-Tourin Scheme for Adaptive Matrix-Valued Morphology -- Component-Trees and Multi-value Images: A Comparative Study -- Algorithms -- Fast Implementation of the Ultimate Opening -- Stack Filter Classifiers -- Milena: Write Generic Morphological Algorithms Once, Run on Many Kinds of Images -- An Efficient Algorithm for Computing Multi-scale Connectivity Measures.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Symposium on Mathematical Morphology, ISMM 2009 held in Groningen, The Netherlands in August 2009. The 27 revised full papers presented together with one invited paper were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on theory, connectivity and connected filters, adaptive morphology, graphs and topology, segmentation, shape, morphology of multi-valued images, and algorithms.
