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-- 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.