Mathematical Morphology And Its Applications To Image And Signal Processing Computational Imaging And Vision

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Mathematical Morphology and Its Applications to Signal and Image Processing - Bernhard Burgeth 2019-06-19
This book contains the refereed proceedings of the 14th International Symposium on Mathematical Morphology, ISMM 2019, held in Saarbrücken, Germany, in July 2019. The 40 revised full papers presented together with one invited talk were carefully reviewed and selected from 54 submissions. The papers are organized in topical sections on Theory, Discrete Topology and Tomography, Trees and Hierarchies, Multivariate Morphology, Computational Morphology, Machine Learning, Segmentation, Applications in Engineering, and Applications in (Bio)medical Imaging.
Mathematical Morphology and Its Applications to Signal and Image Processing - Cris L. Luengo Hendriks 2013-05-13

Mathematical Morphology and its Applications to Image and Signal Processing - Henk J.A.M. Heijmans 1998-05-31
This book contains the proceedings of the International Symposium on Mathematical Morphology and its Applications to Image and Signal Processing IV, held June 3-5, 1998, in Amsterdam, The Netherlands. The purpose of the work is to provide the image analysis community with a sampling of recent developments in theoretical and practical aspects of mathematical morphology and its applications to image and signal processing. Among the areas covered are: digitization and connectivity, skeletonization, multivariate morphology, morphological segmentation, color image processing, filter design, gray-scale morphology, fuzzy morphology, decomposition of morphological operators, random sets and statistical inference, differential morphology and scale-space, morphological

algorithms and applications. Audience: This volume will be of interest to research mathematicians and computer scientists whose work involves mathematical morphology, image and signal processing.

Image Algebra and Morphological Image Processing III - Paul D. Gader 1992

Mathematical Morphology - Laurent Najman 2013-01-24 Mathematical Morphology allows for the analysis and processing of geometrical structures using techniques based on the fields of set theory, lattice theory, topology, and random functions. It is the basis of morphological image processing, and finds applications in fields including digital image processing (DSP), as well as areas for graphs, surface meshes, solids, and other spatial structures. This book presents an up-to-date treatment of mathematical morphology, based on the three pillars that made it an important field of theoretical work and practical application: a solid theoretical foundation, a large body of applications and an efficient implementation. The book is divided into five parts and includes 20 chapters. The five parts are structured as follows: Part I sets out the fundamental aspects of the discipline, starting with a general introduction, followed by two more theory-focused chapters, one addressing its mathematical structure and including an updated formalism, which is the result of several decades of work. Part II extends this formalism to some non-deterministic aspects of the theory, in particular detailing links with other disciplines such as stereology, geostatistics and fuzzy logic. Part III addresses the theory of morphological filtering and segmentation, featuring modern connected approaches, from both theoretical and practical aspects. Part IV features practical aspects of mathematical morphology, in particular how to deal with color and multivariate data, links to discrete geometry and topology, and some algorithmic aspects; without which applications would be impossible. Part V showcases all the previously noted fields of work through a sample of interesting, representative and varied applications.

Mathematical Morphology and Its Applications to Image and Signal Processing - Pierre Soille 2011-06-29 This book contains the refereed proceedings of the 10th International Symposium on Mathematical Morphology, ISMM 2011 held in Verbania-Intra, Italy in July 2011. It is a collection of 39 revised full papers, from which 27 were selected for oral and 12 for poster presentation, from a total of 49 submissions. Moreover, the book features two invited contributions in the fields of remote sensing, image analysis and scientific visualization. The papers are organized in thematic sections on theory, lattices and order, connectivity, image analysis, processing and segmentation, adaptive morphology, algorithms, remote sensing, visualization, and applications.

Mathematical Morphology and Its Applications to Signal and Image Processing - Jón Atli Benediktsson 2015-05-15 This book contains the thoroughly refereed proceedings of the 12th International Symposium on Mathematical Morphology, ISMM 2015 held in Reykjavik, Iceland, in May 2015. The 62 revised full papers were carefully reviewed and selected from 72 submissions. The papers are organized in topical sections on evaluations and applications; hierarchies; color, multivalued and orientation fields; optimization, differential calculus and probabilities; topology and discrete geometry; and algorithms and implementation.

Mathematical Morphology and Its Applications to Image and Signal Processing - Pierre Soille 2011-06-24 This book contains the refereed proceedings of the 10th International Symposium on Mathematical Morphology, ISMM 2011 held in Verbania-Intra, Italy in July 2011. It is a collection of 39 revised full papers, from which 27 were selected for oral and 12 for poster presentation, from a total of 49 submissions. Moreover, the book features two invited contributions in the

fields of remote sensing, image analysis and scientific visualization. The papers are organized in thematic sections on theory, lattices and order, connectivity, image analysis, processing and segmentation, adaptive morphology, algorithms, remote sensing, visualization, and applications.

Mathematical Morphology in Geomorphology and GISci - Behara Seshadri Daya Sagar 2016-04-19
Mathematical Morphology in Geomorphology and GISci presents a multitude of mathematical morphological approaches for processing and analyzing digital images in quantitative geomorphology and geographic information science (GISci). Covering many interdisciplinary applications, the book explains how to use mathematical morphology not only to perform

Handbook of Image Engineering - Yu-Jin Zhang 2020-12-10
Image techniques have been developed and implemented for various purposes, and image engineering (IE) is a rapidly evolving, integrated discipline comprising the study of all the different branches of image techniques, and encompassing mathematics, physics, biology, physiology, psychology, electrical engineering, computer science and automation. Advances in the field are also closely related to the development of telecommunications, biomedical engineering, remote sensing, surveying and mapping, as well as document processing and industrial applications. IE involves three related and partially overlapping groups of image techniques: image processing (IP) (in its narrow sense), image analysis (IA) and image understanding (IU), and the integration of these three groups makes the discipline of image engineering an important part of the modern information era. This is the first handbook on image engineering, and provides a well-structured, comprehensive overview of this new discipline. It also offers detailed information on the various image techniques. It is a valuable reference resource for R&D professional and undergraduate students involved in image-related activities.

Mathematical Morphology and Its Application to Signal and Image Processing - Michael H. F. Wilkinson 2009-08-06
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.

Morphological Image Analysis - Pierre Soille 2013-03-14
The book is self-contained in the sense that it is accessible to engineers, scientists, and practitioners having no prior experience with morphology. In addition, most necessary background notions about digital image processing are covered. The emphasis being put on the techniques useful for solving practical problems rather than the theory underlying mathematical morphology, no special knowledge about set theory and topology is required. Nevertheless, the book goes well beyond an introduction to mathematical morphology. Indeed, starting from the fundamental transformations, more elaborate methods which have proven their practical usefulness are explained. This is achieved through a step by step process pursued until the most recent advances.

Mathematical Morphology and Its Applications to Image and Signal Processing - Aldo Morales 1990

Mathematical Morphology and Its Applications for Still and Moving Image Processing - Ting Chen 2004

Mathematical Morphology and Its Application to Signal and Image Processing - Michael H. F. Wilkinson 2009-08-19
The 9th ISMM conference covered a very diverse collection of

papers, bound together by the central themes of mathematical morphology, namely, the tre- ment of images in terms of set and lattice theory. Notwithstanding this central theme, this ISMM showed increasing interaction with other ?elds of image and signal processing, and several hybrid methods were presented, which combine the strengths of traditional morphological methods with those of, for example, linear ?ltering.This trendis particularlystrong in the emerging?eld of adaptive morphological ?ltering, where the local shape of structuring elements is det- mined by non-morphological techniques. This builds on previous developments of PDE-based methods in morphology and amoebas. In segmentation we see similar advancements, in the development of morphological active contours. Even within morphology itself, diversi?cation is great, and many new areas of research are being opened up. In particular, morphology of graph-based and complex-based image representations are being explored. Likewise, in the we- established area of connected ?ltering we ?nd new theory and new algorithms, but also expansion into the direction of hyperconnected ?lters. New advances in morphological machine learning, multi-valued and fuzzy morphology are also presented. Notwithstanding the often highly theoretical reputation of mathematical morphology, practitioners in this ?eld have always had an eye for the practical.

Discrete Geometry and Mathematical Morphology - Joakim Lindblad 2021-05-15
This book constitutes the proceedings of the First IAPR International Conference on Discrete Geometry and Mathematical Morphology, DGMM 2021, which was held during May 24-27, 2021, in Uppsala, Sweden. The conference was created by joining the International Conference on Discrete Geometry for computer Imagery, DGCI, with the International Symposium on Mathematical Morphology, ISMM. The 36 papers included in this volume were carefully reviewed and selected from 59 submissions. They were organized in topical sections as follows:

applications in image processing, computer vision, and pattern recognition; discrete and combinatorial topology; discrete geometry - models, transforms, visualization; discrete tomography and inverse problems; hierarchical and graph-based models, analysis and segmentation; learning-based approaches to mathematical morphology; multivariate and PDE-based mathematical morphology, morphological filtering. The book also contains 3 invited keynote papers.

Hands-on Morphological Image Processing - Edward R. Dougherty 2003
Morphological image processing, a standard part of the imaging scientist's toolbox, can be applied to a wide range of industrial applications. Concentrating on applications, this text shows how to analyse the problems and then develop successful algorithms to solve them.

Mathematical Morphology and Its Applications to Image Processing - Jean Serra 2012-10-14
Mathematical morphology (MM) is a theory for the analysis of spatial structures. It is called morphology since it aims at analysing the shape and form of objects, and it is mathematical in the sense that the analysis is based on set theory, topology, lattice algebra, random functions, etc. MM is not only a theory, but also a powerful image analysis technique. The purpose of the present book is to provide the image analysis community with a snapshot of current theoretical and applied developments of MM. The book consists of forty-five contributions classified by subject. It demonstrates a wide range of topics suited to the morphological approach.

Mathematical Morphology and Its Applications to Image and Signal Processing - Petros Maragos 2012-12-06
Mathematical morphology (MM) is a powerful methodology for the quantitative analysis of geometrical structures. It consists of a broad and coherent collection of theoretical concepts, nonlinear signal operators, and algorithms aiming at extracting, from

images or other geometrical objects, information related to their shape and size. Its mathematical origins stem from set theory, lattice algebra, and integral and stochastic geometry. MM was initiated in the late 1960s by G. Matheron and J. Serra at the Fontainebleau School of Mines in France. Originally it was applied to analyzing images from geological or biological specimens. However, its rich theoretical framework, algorithmic efficiency, easy implementability on special hardware, and suitability for many shape- oriented problems have propelled its widespread diffusion and adoption by many academic and industry groups in many countries as one among the dominant image analysis methodologies. The purpose of Mathematical Morphology and its Applications to Image and Signal Processing is to provide the image analysis community with a sampling from the current developments in the theoretical (deterministic and stochastic) and computational aspects of MM and its applications to image and signal processing. The book consists of the papers presented at the ISMM'96 grouped into the following themes: Theory Connectivity Filtering Nonlinear System Related to Morphology Algorithms/Architectures Granulometries, Texture Segmentation Image Sequence Analysis Learning Document Analysis Applications

Mathematical Morphology and Its Applications to Image Processing - Jean Serra 2012-12-06
Mathematical morphology (MM) is a theory for the analysis of spatial structures. It is called morphology since it aims at analysing the shape and form of objects, and it is mathematical in the sense that the analysis is based on set theory, topology, lattice algebra, random functions, etc. MM is not only a theory, but also a powerful image analysis technique. The purpose of the present book is to provide the image analysis community with a snapshot of current theoretical and applied developments of MM. The book consists of forty-five contributions classified by subject. It demonstrates a wide range of topics suited to the

morphological approach.
Mathematical Foundations of Image Processing and Analysis - Jean-Charles Pinoli 2014-07-09
Image processing and image analysis are typically important fieldsin information science and technology. By "imageprocessing", we generally understand all kinds of operationperformed on images (or sequences of images) in order to increasetheir quality, restore their original content, emphasize someparticular aspect of the information or optimize theirtransmission, or to perform radiometric and/or spatial analysis. By"image analysis" we understand, however, all kinds ofoperation performed on images (or sequences of images) in order toextract qualitative or quantitative data, perform measurements andapply statistical analysis. Whereas there are nowadays many booksdealing with image processing, only a small number deal with imageanalysis. The methods and techniques involved in these fields ofcourse have a wide range of applications in our daily world:industrial vision, material imaging, medical imaging, biologicalimaging, multimedia applications, satellite imaging, qualitycontrol, traffic control, and so on
Wavelet Analysis with Applications to Image Processing - Lakshman Prasad 2020-01-29
Wavelet analysis is among the newest additions to the arsenals of mathematicians, scientists, and engineers, and offers common solutions to diverse problems. However, students and professionals in some areas of engineering and science, intimidated by the mathematical background necessary to explore this subject, have been unable to use this powerful tool. The first book on the topic for readers with minimal mathematical backgrounds, Wavelet Analysis with Applications to Image Processing provides a thorough introduction to wavelets with applications in image processing. Unlike most other works on this subject, which are often collections of papers or research advances, this book offers students and researchers without an

extensive math background a step-by-step introduction to the power of wavelet transforms and applications to image processing. The first four chapters introduce the basic topics of analysis that are vital to understanding the mathematics of wavelet transforms. Subsequent chapters build on the information presented earlier to cover the major themes of wavelet analysis and its applications to image processing. This is an ideal introduction to the subject for students, and a valuable reference guide for professionals working in image processing.

Mathematical Morphology and Its Applications to Signal and Image Processing - Jesús Angulo 2017-04-07
This book contains the refereed proceedings of the 13th International Symposium on Mathematical Morphology, ISMM 2017, held in Fontainebleau, France, in May 2017. The 36 revised full papers presented together with 4 short papers were carefully reviewed and selected from 53 submissions. The papers are organized in topical sections on algebraic theory, max-plus and max-min mathematics; discrete geometry and discrete topology; watershed and graph-based segmentation; trees and hierarchies; topological and graph-based clustering, classification and filtering; connected operators and attribute filters; PDE-based morphology; scale-space representations and nonlinear decompositions; computational morphology; object detection; and biomedical, material science and physical applications.

Handbook of Spatial Logics - Marco Aiello 2007-09-04
The aim of this handbook is to create, for the first time, a systematic account of the field of spatial logic. The book comprises a general introduction, followed by fourteen chapters by invited authors. Each chapter provides a self-contained overview of its topic, describing the principal results obtained to date, explaining the methods used to obtain them, and listing the most important open problems. Jointly, these contributions constitute a comprehensive survey of this rapidly expanding subject.

Image Processing - Henri Ma?tre 2008-11-10
Computer-aided automatic processing of images requires the control of a series of operations, which this book analyzes. Knowing the statistical properties of images, sampling them to reduce the observable world to a series of discrete values, restoring images in order to correct degradations – all these operations are explained here, together with the mathematical tools they require. Topics covered include fractal representation, mathematical morphology, wavelet representations and the detection and description of contours and shapes.

Image Processing and Mathematical Morphology - Frank Y. Shih 2017-07-12
In the development of digital multimedia, the importance and impact of image processing and mathematical morphology are well documented in areas ranging from automated vision detection and inspection to object recognition, image analysis and pattern recognition. Those working in these ever-evolving fields require a solid grasp of basic fundamentals, theory, and related applications—and few books can provide the unique tools for learning contained in this text. Image Processing and Mathematical Morphology: Fundamentals and Applications is a comprehensive, wide-ranging overview of morphological mechanisms and techniques and their relation to image processing. More than merely a tutorial on vital technical information, the book places this knowledge into a theoretical framework. This helps readers analyze key principles and architectures and then use the author's novel ideas on implementation of advanced algorithms to formulate a practical and detailed plan to develop and foster their own ideas. The book: Presents the history and state-of-the-art techniques related to image morphological processing, with numerous practical examples Gives readers a clear tutorial on complex technology and other tools that rely on their intuition for a clear understanding of the subject Includes an updated bibliography

and useful graphs and illustrations Examines several new algorithms in great detail so that readers can adapt them to derive their own solution approaches This invaluable reference helps readers assess and simplify problems and their essential requirements and complexities, giving them all the necessary data and methodology to master current theoretical developments and applications, as well as create new ones.

Morphological Image Operators - Henk J. A. M. Heijmans 1994
This supplement to the prestigious Advances in Electronics and Electron Physics series presents a systematic and self-contained treatment of morphological generators (transformations). Morphological Image Operators begins with a comprehensive introduction for the inexperienced, and continues with a detailed exposition of the algebraic approach to mathematical morphology, topological and geometrical aspects, applications to grey-scale and colour images, and morphological filters. The theories are presented with concrete examples wherever possible and depicted by various examples as well as numerous graphical illustrations and pictures.

Mathematical Morphology on the Sphere - Joana Maria Frontera Pons 2011

Mathematical Morphology and Its Applications to Image and Signal Processing - Petros Maragos 1996-05-31
Mathematical morphology (MM) is a powerful methodology for the quantitative analysis of geometrical structures. It consists of a broad and coherent collection of theoretical concepts, nonlinear signal operators, and algorithms aiming at extracting, from images or other geometrical objects, information related to their shape and size. Its mathematical origins stem from set theory, lattice algebra, and integral and stochastic geometry. MM was initiated in the late 1960s by G. Matheron and J. Serra at the Fontainebleau School of Mines in France. Originally it was applied to analyzing images from geological or biological specimens. However, its rich theoretical framework, algorithmic efficiency, easy implementability on special hardware, and suitability for many shape- oriented problems have propelled its widespread diffusion and adoption by many academic and industry groups in many countries as one among the dominant image analysis methodologies. The purpose of Mathematical Morphology and its Applications to Image and Signal Processing is to provide the image analysis community with a sampling from the current developments in the theoretical (deterministic and stochastic) and computational aspects of MM and its applications to image and signal processing. The book consists of the papers presented at the ISMM'96 grouped into the following themes: Theory Connectivity Filtering Nonlinear System Related to Morphology Algorithms/Architectures Granulometries, Texture Segmentation Image Sequence Analysis Learning Document Analysis Applications

Mathematical Morphology and Its Applications to Signal and Image Processing - Cris L. Luengo Hendriks 2013-05-13
This book contains the refereed proceedings of the 11th International Symposium on Mathematical Morphology, ISMM 2013 held in Uppsala, Sweden, in May 2013. The 41 revised full papers presented together with 3 invited papers were carefully reviewed and selected from 52 submissions. The papers are organized in topical sections on theory; trees and hierarchies; adaptive morphology; colour; manifolds and metrics; filtering; detectors and descriptors; and applications.

Mathematical Morphology - Hugues Talbot 2002
Provides a broad sampling of the most recent theoretical and practical developments in applications to image processing and analysis.

A Beginner's Guide to Image Preprocessing Techniques - Jyotismita Chaki 2018-10-25
For optimal computer vision outcomes, attention to image pre-processing is required so that one can improve image features by

eliminating unwanted falsification. This book emphasizes various image pre-processing methods which are necessary for early extraction of features from the image. Effective use of image pre-processing can offer advantages and resolve complications that finally results in improved detection of local and global features. Different approaches for image enrichments and improvements are conferred in this book that will affect the feature analysis depending on how the procedures are employed. Key Features Describes the methods used to prepare images for further analysis which includes noise removal, enhancement, segmentation, local, and global feature description Includes image data pre-processing for neural networks and deep learning Covers geometric, pixel brightness, filtering, mathematical morphology transformation, and segmentation pre-processing techniques Illustrates a combination of basic and advanced pre-processing techniques essential to computer vision pipeline Details complications to resolve using image pre-processing

Fuzzy Information Processing 2020 - Barnabás Bede 2021-12-09

This book describes how to use expert knowledge—which is often formulated by using imprecise (fuzzy) words from a natural language. In the 1960s, Zadeh designed special "fuzzy" techniques for such use. In the 1980s, fuzzy techniques started controlling trains, elevators, video cameras, rice cookers, car transmissions, etc. Now, combining fuzzy with neural, genetic, and other intelligent methods leads to new state-of-the-art results: in aerospace industry (from drones to space flights), in mobile robotics, in finances (predicting the value of crypto-currencies), and even in law enforcement (detecting counterfeit banknotes, detecting online child predators and in creating explainable AI systems). The book describes these (and other) applications—as well as foundations and logistics of fuzzy techniques. This book can be recommended to specialists—both in fuzzy and in various application areas—who will learn latest techniques and their applications, and to students interested in innovative ideas.

Applications of Discrete Geometry and Mathematical Morphology - Ullrich Köthe 2012-07-30

This book constitutes the refereed proceedings of the first Workshop on Applications of Discrete Geometry and Mathematical Morphology, WADGMM 2010, held at the International Conference on Pattern Recognition in Istanbul, Turkey, in August 2010. The 11 revised full papers presented were carefully reviewed and selected from 25 submissions. The book was specifically designed to promote interchange and collaboration between experts in discrete geometry/mathematical morphology and potential users of these methods from other fields of image analysis and pattern recognition.

Introduction to Video and Image Processing - Thomas B. Moeslund 2012-01-25

This textbook presents the fundamental concepts and methods for understanding and working with images and video in an unique, easy-to-read style which ensures the material is accessible to a wide audience. Exploring more than just the basics of image processing, the text provides a specific focus on the practical design and implementation of real systems for processing video data. Features: includes more than 100 exercises, as well as C-code snippets of the key algorithms; covers topics on image acquisition, color images, point processing, neighborhood processing, morphology, BLOB analysis, segmentation in video, tracking, geometric transformation, and visual effects; requires only a minimal understanding of mathematics; presents two chapters dedicated to applications; provides a guide to defining suitable values for parameters in video and image processing systems, and to conversion between the RGB color representation and the HIS, HSV and YUV/YCbCr color representations.

Stochastic Geometry - Wilfrid S. Kendall 2019-06-10

Stochastic geometry involves the study of random geometric

structures, and blends geometric, probabilistic, and statistical methods to provide powerful techniques for modeling and analysis. Recent developments in computational statistical analysis, particularly Markov chain Monte Carlo, have enormously extended the range of feasible applications. Stochastic Geometry: Likelihood and Computation provides a coordinated collection of chapters on important aspects of the rapidly developing field of stochastic geometry, including: o a "crash-course" introduction to key stochastic geometry themes o considerations of geometric sampling bias issues o tesselations o shape o random sets o image analysis o spectacular advances in likelihood-based inference now available to stochastic geometry through the techniques of Markov chain Monte Carlo

Mathematical Morphology and Its Applications to Image and Signal Processing - John Goutsias 2006-04-11

Mathematical morphology is a powerful methodology for the processing and analysis of geometric structure in signals and images. This book contains the proceedings of the fifth International Symposium on Mathematical Morphology and its Applications to Image and Signal Processing, held June 26-28, 2000, at Xerox PARC, Palo Alto, California. It provides a broad sampling of the most recent theoretical and practical developments of mathematical morphology and its applications to image and signal processing. Areas covered include: decomposition of structuring functions and morphological operators, morphological discretization, filtering, connectivity and connected operators, morphological shape analysis and interpolation, texture analysis, morphological segmentation, morphological multiresolution techniques and scale-spaces, and morphological algorithms and applications. Audience: The subject matter of this volume will be of interest to electrical engineers, computer scientists, and mathematicians whose research work is focused on the theoretical and practical aspects of nonlinear signal and image processing. It will also be of interest to those

working in computer vision, applied mathematics, and computer graphics.

Mathematical Morphology in Image Processing - Edward Dougherty 2018-10-03

Presents the statistical analysis of morphological filters and their automatic optical design, the development of morphological features for image signatures, and the design of efficient morphological algorithms. Extends the morphological paradigm to include other branches of science and mathematics.;This book is designed to be of interest to optical, electrical and electronics, and electro-optic engineers, including image processing, signal processing, machine vision, and computer vision engineers, applied mathematicians, image analysts and scientists and graduate-level students in image processing and mathematical morphology courses.

Mathematical Morphology: 40 Years On - Christian Ronse 2006-03-30

Mathematical Morphology is a speciality in Image Processing and Analysis, which considers images as geometrical objects, to be analyzed through their interactions with other geometrical objects. It relies on several branches of mathematics, such as discrete geometry, topology, lattice theory, partial differential equations, integral geometry and geometrical probability. It has produced fast and efficient algorithms for computer analysis of images, and has found applications in bio-medical imaging, materials science, geoscience, remote sensing, quality control, document processing and data analysis. This book contains the 43 papers presented at the 7th International Symposium on Mathematical Morphology, held in Paris on April 18-20, 2005. It gives a lively state of the art of current research topics in this field. It also marks a milestone, the 40 years of uninterrupted development of this ever-expanding domain.

Morphological Image Analysis - Pierre Soille 2013-03-14
From reviews of the first edition: "This is a scholarly tour de force

through the world of morphological image analysis [...]. I recommend this book unreservedly as the best one I have encountered on this particular topic [...]" BMVA News