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Titolo	Mathematical Image Processing / / by Kristian Bredies, Dirk Lorenz
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ISBN	3-030-01458-4
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIII, 473 p. 129 illus., 22 illus. in color.)
Collana	Applied and Numerical Harmonic Analysis, , 2296-5009
Disciplina	621.367 621.3670151
Soggetti	Mathematical models Applied mathematics Engineering mathematics Mathematical Modeling and Industrial Mathematics Applications of Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Mathematical preliminaries -- Basic tools -- Frequency and multiscale methods -- Partial differential equations in image processing -- Variational methods.
Sommario/riassunto	This book addresses the mathematical aspects of modern image processing methods, with a special emphasis on the underlying ideas and concepts. It discusses a range of modern mathematical methods used to accomplish basic imaging tasks such as denoising, deblurring, enhancing, edge detection and inpainting. In addition to elementary methods like point operations, linear and morphological methods, and methods based on multiscale representations, the book also covers more recent methods based on partial differential equations and variational methods. Review of the German Edition: The overwhelming impression of the book is that of a very professional presentation of an appropriately developed and motivated textbook for a course like an introduction to fundamentals and modern theory of mathematical image processing. Additionally, it belongs to the bookcase of any office where someone is doing research/application in image processing. It has the virtues of a good and handy reference manual. (zbMATH,

reviewer: Carl H. Rohwer, Stellenbosch).