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Titolo	Visual Computing : Scientific Visualization and Imaging Systems / / edited by Fabiana Rodrigues Leta
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Descrizione fisica	1 online resource (256 p.)
Collana	Augmented Vision and Reality, , 2190-5924 ; ; 4
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Soggetti	Signal processing Computer vision Materials - Analysis Signal, Speech and Image Processing Computer Vision Characterization and Analytical Technique
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	General concepts applied in simulations and image analysis -- Multidisciplinary Scientific Visualization in European R&D Projects -- A Distributed Architecture for Simulation Environments based on Game Engine Systems -- GIDE : Graphic Interface for Discrete Element -- Important Parameters for Digital Image Color Analysis: an Overview -- Medicine Applications -- An Automated System for 3D Segmentation of CT Angiograms -- Wavelet Compression/Reconstruction and Visualisation of Pulmonary X-Ray Images for Achieving of Asbestosis Infected Patients Data -- Materials Applications -- Strain measurement in an aluminium foam by means of Digital Image Correlation.
Sommario/riassunto	This volume aims to stimulate discussions on research involving the use of data and digital images as an understanding approach for analysis and visualization of phenomena and experiments. The emphasis is put not only on graphically representing data as a way of increasing its visual analysis, but also on the imaging systems which contribute greatly to the comprehension of real cases. Scientific Visualization and Imaging Systems encompass multidisciplinary areas,

with applications in many knowledge fields such as Engineering, Medicine, Material Science, Physics, Geology, Geographic Information Systems, among others. This book is a selection of 13 revised and extended research papers presented in the International Conference on Advanced Computational Engineering and Experimenting -ACE-X conferences 2010 (Paris), 2011 (Algarve), 2012 (Istanbul) and 2013 (Madrid). The examples were particularly chosen from materials research, medical applications, general concepts applied in simulations and image analysis and other interesting related problems.