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	Nota di contenuto	Intro -- GPR Remote Sensing in Archaeology -- Preface -- Acknowledgements -- Contents -- Chapter 1: Introduction -- 1.1 Authors and Prologue -- References -- Chapter 2: Understanding GPR via a Simulator -- 2.1 Earth Model -- 2.2 Reflection -- 2.3 Transmission -- 2.4 Refraction -- 2.5 Attenuation -- 2.6 Antenna Beam -- 2.7 Antenna Pulse -- 2.8 Raypaths -- References -- Chapter 3: Basic GPR Signal Processing -- 3.1 Post Processing Gain -- 3.2 Bandpass Filtering -- 3.2.1 Notch Filters -- 3.2.2 Low Frequency GPR and Bandpass Filtering -- 3.3 Spectral Whitening -- 3.4 Background Removal -- 3.5 Migration -- 3.6 Hilbert Transform -- 3.7 Deconvolution -- 3.8 Resampling -- 3.9 Smoothing/Stacking -- References -- Chapter 4: GPR Image Construction and Image Processing -- 4.1 Early History of GPR Time Slicing -- 4.2 Image

Sommario/riassunto	This book provides a complete description of the processes needed to take raw GPR data all the way to the construction of subsurface images. The book provides an introduction to the theory of GPR by using a simulator that shows how radar profiles across simple model structures look and provides many examples so that the complexity of radar signatures can be understood. The book continues with a review of the necessary radargram signal processes needed along with examples. The most comprehensive methodology to construct subsurface images from either coarsely spaced data using interpolation or from dense data from multi-channel equipment and 3D volume generation is presented. Advanced imaging solutions such as overlay analysis are introduced and numerous worldwide site case histories are shown. The authors present their studies in away that most technical and non-technical users of the equipment will find it useful for implementing in their own subsurface investigations.