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	 evaluation; 2.3. Compression of still images; 2.3.1. JPEG standard; 2.3.1.1. Why use DCT?; 2.3.1.2. Quantization; 2.3.1.3. Coding; 2.3.1.4. Compression of still color images with JPEG; 2.3.1.5. JPEG standard: conclusion; 2.3.2. JPEG 2000 standard 2.3.2.1. Wavelet transform2.3.2.2. Decomposition of images with the wavelet transform; 2.3.2.3. Quantization and coding of subbands; 2.3.2.4. Wavelet-based compression methods, serving as references; 2.3.2.5. JPEG 2000 standard; 2.4. The compression of image sequences; 2.4.1. DCT-based video compression scheme; 2.4.2. A history of and comparison between video standards; 2.4.3. Recent developments in video compression; 2.5. Compressing 1D signals; 2.6. The compression of 3D objects; 2.7. Conclusion and future developments; 2.8. Bibliography Chapter 3. Specificities of Physiological Signals and Medical Images3.1. Introduction; 3.2. Characteristics of physiological signals; 3.2.1.4. Electrocardiogram (ECG); 3.2.2. Physiological signal acquisition; 3.2.3. Properties of physiological signals; 3.2.3.1. Properties of EEG signals; 3.2.3.2. Properties of ECG signals; 3.3. Specificities of medical images; 3.3.1.1. Radiology 3.3.1.2. Magnetic resonance imaging (MRI)3.3.1.3. Ultrasound; 3.3.1.4. Nuclear medicine; 3.3.1.5. Anatomopathological imaging; 3.3.1.6. Conclusion; 3.3.2. Properties of medical images; 3.3.2.1. The size of images; 3.3.2.2. Spatial and temporal resolution; 3.3.2.3. Noise in medical images; 3.4. Conclusion; 3.5. Bibliography; Chapter 4. Standards in Medical Image Compression; 4.1. Introduction; 4.2. Standards in Medical Image Compression; 4.1. Introduction; 4.2. Standards in Medical Image Compression; 4.1. Introduction; 4.2.
Sommario/riassunto	During the last decade, image and signal compression for storage and transmission purpose has seen a great expansion. But what about medical data compression? Should a medical image or a physiological signal be processed and compressed like any other data? The progress made in imaging systems, storing systems and telemedicine makes compression in this field particularly interesting. However, this compression has to be adapted to the specificities of biomedical data which contain diagnosis information. As such, this book offers an overview of compression techniques applied to medical data, i