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Titolo	Medical Image Watermarking : Techniques and Applications // edited by Amit Kumar Singh, Basant Kumar, Ghanshyam Singh, Anand Mohan
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Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (263 pages)
Collana	Multimedia Systems and Applications
Disciplina	005.82
Soggetti	Data protection Optical data processing Signal processing Image processing Speech processing systems Health administration Multimedia information systems Health informatics Security Image Processing and Computer Vision Signal, Image and Speech Processing Health Administration Multimedia Information Systems Health Informatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- List of Figures -- List of Tables -- List of Abbreviations -- Table of Contents -- Chapter 1: Digital image watermarking: concepts and applications -- Chapter 2: Medical image watermarking techniques: a technical survey and potential challenges -- Chapter 3: Analytical study and performance evaluation of medical image watermarking techniques -- Chapter 4: Robust and imperceptible hybrid watermarking techniques for medical images -- Chapter 5: Robust and secure multiple watermarking for medical images --

Chapter 6: Secure Spread Spectrum based multiple watermarking technique for medical images -- Chapter 7: Robust and secure multiple watermarking technique for application in tele-ophthalmology -- Chapter 8: Secure multiple watermarking technique using neural networks -- Chapter 9: Securing patient data through multiple watermarking and selective encryption -- Chapter 10: State-of-the-art techniques of image watermarking: new trends and future challenges.

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### Sommario/riassunto

This book presents medical image watermarking techniques and algorithms for telemedicine and other emerging applications. This book emphasizes on medical image watermarking to ensure the authenticity of transmitted medical information. It begins with an introduction of digital watermarking, important characteristics, novel applications, different watermarking attacks and standard benchmark tools. This book also covers spatial and transform domain medical image watermarking techniques and their merits and limitations. The authors have developed improved/novel watermarking techniques for telemedicine applications that offer higher robustness, better perceptual quality and increased embedding capacity and secure watermark. The suggested methods may find potential applications in the prevention of patient identity theft and health data management issues which is a growing concern in telemedicine applications. This book provides a sound platform for understanding the medical image watermarking paradigm for researchers in the field and advanced-level students. Industry professionals working in this field, as well as other emerging applications demanding robust and secure watermarking will find this book useful as a reference.

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