1. Record Nr. UNINA9910144108103321 3D object processing [[electronic resource]]: compression, indexing Titolo and watermarking / / edited by Jean-Luc Dugelay, Atilla Baskurt, Mohamed Daoudi Chichester, England; ; Hoboken, NJ, : J. Wiley & Sons, c2008 Pubbl/distr/stampa **ISBN** 0-470-51077-3 1-281-83716-4 9786611837167 0-470-51078-1 Descrizione fisica 1 online resource (212 p.) Altri autori (Persone) BaskurtAtilla <1960-> DaoudiMohamed, Ph. D. DugelayJean-Luc Disciplina 621.36/7 621.367 Soggetti Digital images - Watermarking Image compression Image processing - Digital techniques Three-dimensional imaging Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 3D Object Processing; Contents; About the Contributors; Introduction; 1 Basic Background in 3D Object Processing; 1.1 3D Representation and Models; 1.2 3D Data Source; 1.3 3D Quality Concepts; 1.4 Summary; References; 2 3D Compression; 2.1 Introduction; 2.2 Basic Review of 2D Compression; 2.3 Coding and Scalability Basis; 2.4 Direct 3D Compression: 2.5 Compression Based on Approximation: 2.6 Normative Aspect: MPEG-4; 2.7 Conclusion; 2.8 Summary; 2.9 Questions and Problems; References; 3 3D Indexing and Retrieval; 3.1

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## Sommario/riassunto

The arrival, and continuing evolution, of high quality 3D objects has been made possible by recent progress in 3D scanner acquisition and 3D graphics rendering. With this increasing quality comes a corresponding increase in the size and complexity of the data files and the necessity for advances in compression techniques. Effective indexing to facilitate the retrieval of the 3D data is then required to efficiently store, search and recapture the objects that have been compressed. The application of 3D images in fields such as communications, medicine and the military also calls for copyrigh