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Collana	Signals and Communication Technology, , 1860-4862
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Soggetti	Optical data processing Electrical engineering Computer-aided engineering Digital media Image Processing and Computer Vision Communications Engineering, Networks Computer-Aided Engineering (CAD, CAE) and Design Digital/New Media
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- Emerging Imaging Technologies: Trends and Challenges -- 3D Content Acquisition and Coding -- Efficient Depth-Based Coding -- Error Concealment Methods for Depth Maps -- Light Field Image Compression -- 3D Video Delivery Systems and Tools -- QoE and Qos Metrics for 3D Content -- 3D Visual Content Datasets -- Trans-disciplinary Aspects and Next Generation of 3D Technologies.
Sommario/riassunto	This book covers the different aspects of modern 3D multimedia technologies by addressing several elements of 3D visual communications systems, using diverse content formats, such as stereo video, video-plus-depth and multiview, and coding schemes for delivery over networks. It also presents the latest advances and research results in regards to objective and subjective quality evaluation of 3D visual content, extending the human factors affecting the perception of quality to emotional states. The contributors describe

technological developments in 3D visual communications, with particular emphasis on state-of-the-art advances in acquisition of 3D visual scenes and emerging 3D visual representation formats, such as: multi-view plus depth and light field; evolution to freeview and light-field representation; compression methods and robust delivery systems; and coding and delivery over various channels. Simulation tools, testbeds and datasets that are useful for advanced research and experimental studies in the field of 3D multimedia delivery services and applications are covered. The international group of contributors also explore the research problems and challenges in the field of immersive visual communications, in order to identify research directions with substantial economic and social impact. 3D Visual Content Creation, Coding and Delivery provides valuable information to engineers and computer scientists developing novel products and services with emerging 3D multimedia technologies, by discussing the advantages and current limitations that need to be addressed in order to develop their products further. It will also be of interest to students and researchers in the field of multimedia services and applications, who are particularly interested in advances bringing significant potential impact on future technological developments.