1. Record Nr. UNINA9910598179903321

Titolo	Sensors and techniques for 3D object modeling in underwater environments / / editors, Fabio Menna, Fabio Remondino, Hans-Gerd Maas
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2016
Descrizione fisica	1 online resource (xx, 368 pages)
Disciplina	623.8205
Soggetti	Three-dimensional imaging Autonomous underwater vehicles Cameras
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Water covers approximately 71% of the planet's surface and human activities have been relying on it since remote times. Many traces of these exist under the "zero level" and will continue to exist in the future. Measuring, positioning, and mapping objects under water have experienced very significant modifications, brought about by advances in technology and also by changed requirements, demands for new products, introduction of new tools, and the modification of existing equipment. The exploration, documentation, and recording of underwater environments remains a difficult task, and is sometimes still unsolved. The research, design, and development of techniques and procedures for correctly validating underwater environments are more than ever important.This Special Issue originates from the ISPRS/CIPA Workshop "UNDERWATER 3D RECORDING & MODELING--Experiences in Data Acquisition, Calibration, Orientation, Modelling & Accuracy Assessment" (http://3dom.fbk.eu/files/underwater/index.html) and will accept improved and extended selected papers derived from the workshop's proceedings, as well as new contributions from international colleagues.We invite you to submit articles on the

following topics:Underwater/Multi-media photogrammetryUnderwater platforms (ROV, AUV, robot, etc.)Characterization of underwater passive and active sensorsUnderwater navigation and positioningUnderwater metrology and inspectionsGeometric modeling in multi-media photogrammetryAccuracy requirement and assessment in underwater 3D applicationsRestoration, enhancement and processing of underwater images3D bathymetry techniquesData processing and underwater 3D modelingSensors for marine biology and water pollutionMulti-sensor integration.