1. Record Nr. UNINA9910299672203321

Titolo	Advances in Water Resources Engineering [[electronic resource] /] / edited by Chih Ted Yang, Lawrence K. Wang
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-11023-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (577 p.)
Collana	Handbook of Environmental Engineering, , 2512-1359 ; ; 14
Disciplina	333.7 363.7394 363.73946 620.1064 628 660.6
Soggetti	Water pollution Fluid mechanics Environmental sciences Environmental engineering Biotechnology Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Engineering Fluid Dynamics Environmental Science and Engineering Environmental Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. Watershed Sediment Dynamics and Modeling: A Watershed Modeling System for the Yellow River -- 2. Integrated Simulation of Interactive Surface Water and Ground Water Systems -- 3. River-Channel Stabilization with Submerged Vanes -- 4. Mathematic Modeling of Non-Equilibrium Sediment Transport, Reservoir Sedimentation, and Fluvial Processes -- 5. Minimum Energy Dissipation Rate Theory and its Applications for Water Resources Engineering -- 6. Hydraulic Modeling

Development and Applications in Water Resources -- 7. Geophysical Methods for the Assessment of Earthen Dams -- 8. Soil Erosion on Upland Areas by Rainfall and Overland Flow -- 9. Advances in Geofluvial Modeling: Methodologies and Applications -- 10. Environmental and Water Engineering Glossary.

Sommario/riassunto

The Handbook of Environmental Engineering is a collection of methodologies that study the effects of pollution and waste in their three basic forms: gas, solid, and liquid. A sister volume to Volume 15: Modern Water Resources Engineering, this volume focuses on the theory and analysis of various water resources systems including watershed sediment dynamics and modeling, integrated simulation of interactive surface water and groundwater systems, river channel stabilization with submerged vanes, non-equilibrium sediment transport, reservoir sedimentation, and fluvial processes, minimum energy dissipation rate theory and applications, hydraulic modeling development and application, geophysical methods for assessment of earthen dams, soil erosion on upland areas by rainfall and overland flow, geofluvial modeling methodologies and applications, and an environmental water engineering glossary. This critical volume will serve as a valuable reference work for advanced undergraduate and graduate students, designers of water resources systems, and scientists and researchers.