Record Nr. UNINA9910299426703321 Rivers – Physical, Fluvial and Environmental Processes / / edited by **Titolo** Pawe Rowiski, Artur Radecki-Pawlik Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-17719-2 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (629 p.) Collana GeoPlanet: Earth and Planetary Sciences, , 2190-5193 Disciplina 551.483 Soggetti Geophysics Geotechnical engineering Geoecology Environmental geology Geophysics/Geodesy Geotechnical Engineering & Applied Earth Sciences Geoecology/Natural Processes 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 Basic physical processes in rivers -- Turbulence in Rivers -- Principles of mechanics of bed forms -- Scour problems downstream of low-head hydraulic structures -- Current research and challenges related to shallow flows -- 1D modeling of flows in open channels -- Modeling of floods-state of the art and research challenges -- 3D modeling of flow in hydraulic structures -- Laboratory models of free-surface flows --Measurements of Turbulence Structure in a Compound Channel. Sommario/riassunto This book describes the domain of research and investigation of physical, chemical and biological attributes of flowing water, and it deals with a cross-disciplinary field of study combining physical, geophysical, hydraulic, technological, environmental interests. It aims

to equip engineers, geophysicists, managers working in water-related arenas as well as advanced students and researchers with the most up to date information available on the state of knowledge about rivers, particularly their physical, fluvial and environmental processes. Information from various but also interrelated areas available in one

volume is the main benefit for potential readers. All chapters are prepared by leading experts from the leading research laboratories from all over the world.