Experimental Fluvial Geomorphology

Users Guide to Physical Modelling and Experimentation
River Variability and Complexity
Tools in Fluvial Geomorphology
Encyclopedia of Geomorphology
Applying Geomorphology to Environmental Management
Experimental Studies of the Fluvial System
Process and Form in Geomorphology
Geomorphology to Support Management
Applications of the River Styles Framework
Field Experiments and Measurement Programs in Geomorphology
River Flow 2004
River Confluences, Tributaries and the Fluvial Network
Chance and Self-Organization
History of Fluvial Hydraulics
Fluvial Geomorphology of Great Britain
A New Perspective
Catchment Experiments in Fluvial Geomorphology
Proceedings of a Meeting of the International Geographical Union Commission on Field Experiments in Geomorphology, Exeter and Huddersfield, UK, August 16-24, 1981
Soil Geomorphology
River Dynamics
Experiments in Reduced Gravity
Experience of the HYDRALAB Network
River Dynamics
Selected Water Resources Abstracts
Global Geomorphology
Geology and Geomorphology of Alluvial and Fluvial Fans
Geomorphology to Support Management
Fractal River Basins
Geomorphology and River Management
Fluvial Forms and Processes
Research in Fluvial Geomorphology
From Depositional Systems to Sedimentary Successions on the Norwegian Continental Margin
Sediment Settling on Mars
Proceedings of the Second International Conference on Fluvial Hydraulics, 23-25 June 2004, Napoli, Italy, Two Volme Set
Fluvial Meanders and Their Sedimentary Products in the Rock Record (IAS SP 48)
Geomorphology
The Role of Subsurface Water in Earth-surface Processes and Landforms
Tectonic Geomorphology
Groundwater Geomorphology

DEMARION TRUJILLO

Users Guide to Physical Modelling and Experimentation Springer Science & Business Media
A comprehensive overview of the geomorphological processes that shape rivers and that should be considered in river management.
River Variability and Complexity New Age International
During the past few decades climatic geomorphology has been substantially enlarged in knowledge, thanks to numerous detailed investigations, the application of a large number of techniques, and the acquisition of abundant absolute dates. The challenge of predicting the effects of the prophesied future global warming on morphogenetic processes and landforms has encouraged geomorphologists to study the Late Pleistocene and Holocene climatic changes from the geomorphological and geological record. The advances achieved in the field of climatic geomorphology during the past years are reflected by the publication of several specific monographs about the different morphoclimatic zones. The aim of this book is to provide an up-to-date general view of this branch of geomorphology. It includes a chapter on applied geomorphology for each morphoclimatic zone providing an approximation of the main environmental problems. Geoscientists, geomorphologists
Tools in Fluvial Geomorphology John Wiley & Sons
Amid increasing interactions with other disciplines and technical advances for detecting, monitoring, and modeling fluvial landscape origin, dynamics, and diversity, a number of scientific works have come out and nested in globally recognized edited books. This book is an attempt in this regard, where a few precise regular research works from diverse disciplinary expertise from around the globe are compiled as chapters. In this collective effort, the application of geoinformatics, field data on natural rivers, instrumentation, use of analytic tools, scientific techniques, numerical models, case studies, illustrations, etc. in understanding formative processes and appraising fluvial landscapes will hopefully provide insight into the current practice of fluvial geomorphology and may guide fruitful and coherent scientific enquiry into the field.
Encyclopedia of Geomorphology Routledge

This book provides a theoretical basis to the arrangement of river basins and networks.

Applying Geomorphology to Environmental Management Bruce Rhoads

This book offers a comprehensive overview of progress in thegeneral area of fluvial remote sensing with a specific focus on itspotential contribution to river management. The book highlights arange of challenging issues by considering a range of spatial andtemporal scales with perspectives from a variety of disciplines.The book starts with an overview of the technical progress leadingto new management applications for a range of field contexts andspatial scales. Topics include colour imagery, multi-spectral andhyper-spectral imagery, video, photogrammetry and LiDAR. The bookthen discusses management applications such as targeted, networkscale, planning, land-use change modelling at catchment scales,characterisation of channel reaches (riparian vegetation,geomorphic features) in both spatial and temporal dimensions, fishhabitat assessment, flow measurement, monitoring river restorationand maintenance and, the appraisal of human perceptions ofriverscapes. Key Features: • A specific focus on management applications in a period ofincreasing demands on managers to characterize river features andtheir evolution at different spatial scales • An integration across all scales of imagery with a cleardiscussion of both ground based and airborne images • Includes a wide-range of environmental problems • Coverage of cutting-edge technology • Contributions from leading researchers in the field

Experimental Studies of the Fluvial System SAGE

Experimental Fluvial GeomorphologyWiley-Interscience

Process and Form in Geomorphology Cambridge University Press

Rivers are important agents of change that shape the Earth's surface and evolve through time in response to fluctuations in climate and other environmental conditions. They are fundamental in landscape development, and essential for water supply, irrigation, and transportation. This book provides a comprehensive overview of the geomorphological processes that shape rivers and that produce change in the form of rivers. It explores how the dynamics of rivers are being affected by anthropogenic change, including climate change, dam construction, and modification of rivers for flood control and land drainage. It discusses how concern about environmental degradation of rivers has led to the emergence of management strategies to restore and naturalize these systems, and how river management techniques work best when coordinated with the natural dynamics of rivers. This textbook provides an excellent resource for students, researchers, and professionals in fluvial geomorphology, hydrology, river science, and environmental policy.

Springer

RiverFlow 2004 is the Second International Conference on Fluvial Hydraulics, organized as speciality conferences under the auspices of the International Association of Hydraulic Engineering and Research (IAHR) within its Fluvial Hydraulics and Eco Hydraulics Sections. RiverFlow conferences are a significant forum of discussion for many researchers

Geomorphology to Support Management Gulf Professional Publishing

Soil geomorphology is the accurate assessment of the genetic relationship of soils and landforms, which is possible only if their interdependence is recognized. This book provides an integration of geomorphology and pedology. Students and scientists in many disciplines should find this book highly relevant to their interests.

Applications of the River Styles Framework Geo

Fluvial Hydraulics Deals With The Hydraulics Of Rivers Flowing Through Credible Material And Transporting Some Of The Material With Them. It Encompasses Mechanics Of Sediment Transportation, Channel Hydraulics, And Channel Formation, Geometry, And Changes In Alluvial Rivers. Even Though The Earlier Civilizations Faced Problems Relating To Alluvial Rivers, The Science Of Fluvial Hydraulics Started Taking Shape Only About 300 Years Back; The Significant Contributions To This Subject Have Been Made Only During The Past Two Centuries.This Book Briefly Outlines The Developments In Fluvial Hydraulics And Gives To The Men Of The Past And Present, Who Have Contributed To The Development Of The Subject, Their Just Due. The Major Emphasis In The Book Being On Hydraulic Aspects, The Peripheral Topics, Such As Erosion And Drainage Patterns, Are Only Briefly Mentioned. It Is Hoped That This Book Will Stimulate Others To Collect Additional Information On The Subject Which Can Form The Basis For A More Exhaustive Record Of The History Of Fluvial Hydraulics.

Field Experiments and Measurement Programs in Geomorphology Routledge

This book provides a detailed coverage of the landforms of Planet Earth and the processes that shaped them. The study of these morphologies, some of which formed during past geological periods under environmental conditions very different from those of today, makes it possible to reconstruct the evolution of relief and to infer environmental changes that have involved geological media, the climate, or human activity. A major advance of Geomorphology in recent decades is the development of techniques that make it possible to quantify morphogenetic processes and rates at which forms change under different environmental conditions. The development of Geochronology, or absolute dating methods, is helping us correct the limitations of relative dating that have prevailed in Geomorphology for many years. The ability to assign numerical ages to both landforms and deposits opens up multiple possibilities for reconstructing the evolution of relief, making correlations, calculating rates, and estimating recurrence periods. A theme of major concern facing people today is the possible warming of the planet due to the release of greenhouse gases into the environment. Investigations conducted by the scientific community show that this temperature increase is at least partially anthropogenic. Given this more-than-probable cause and effect relationship, the most sensible and prudent path is to design and apply mitigation measures to alleviate this heating that can negatively affect both the natural environment and human society. The information that Geomorphology can provide on the recent past (Historical Geomorphology) may be very useful in making predictions on the activity of these potentially dangerous processes in the future and on the possible effects of environmental changes. The aim of this book is to provide a general vision of the multiple aspects of Geomorphology and to provide a methodological foundation to approach the study of various branches of geomorphology. To this end, the book contains a basic bibliography that can be used for future research. In addition, applied aspects of Geomorphology are covered at the end of each chapter to provide knowledge of the activities of geomorphologists in the professional world.

River Flow 2004 Experimental Fluvial Geomorphology

"In recent decades there have been major developments in geomorphology and these are reflected in this major encyclopedia, the first such reference work in the field to be published for thirty-five years"--Provided by publisher.

River Confluences, Tributaries and the Fluvial Network John Wiley & Sons

This book brings together the results of several years of experimental work - much of it never before published - in

drainage basin evolution, hydrology, river-channel morphology and sedimentology. These investigations are related to real-world applications, particularly geological exploration and mapping. The book shows how awareness of natural phenomena can improve management of the natural environment, such as the control of rivers and eroding gullies.

Chance and Self-Organization John Wiley & Sons

Fluvial Geomorphology of Great Britain studies the development of river-made land forms, together with the associated fluvial processes. There are many sites of scientific interest and value throughout the UK. The GCR sites described in this volume represent the wide range of fluvial land forms in the UK, and the accounts provide scientific descriptions of all the fluvial geomorphology sites in Britain selected for statutory nature conservation as SSSIs.

History of Fluvial Hydraulics Elsevier

This book outlines a generic set of procedures, termed the River Styles Framework, which provides a set of tools for interpreting river character, behavior, condition, and recovery potential. Applications of the framework generate a coherent package of geomorphic information, providing a physical template for river rehabilitation activities. management and restoration of rivers is a rapidly growing topic for environmental scientists, geologists and ecologists - this book provides a learning tool with which to approach geomorphic applications to river management describes the essential geomorphological principles underlying river behaviour and evolution demonstrates how the River Styles Framework can turn geomorphic theory into practice, to develop workable strategies for restoration and management based on real case studies and authors extensive experience applicable to river systems worldwide synthesises fluvial geomorphology, ecology and management

Fluvial Geomorphology of Great Britain John Wiley & Sons

The plate tectonics revolution in the earth sciences has provided a valuable new framework for understanding long-term landform development. This innovative text provides a comprehensive introduction to the subject of global geomorphology, with the emphasis placed on large-scale processes and phenomena. Integrating global tectonics into the study of landforms and incorporating planetary geomorphology as a major component the author discusses the impact of climatic change and the role of catastrophic events on landform genesis and includes a comprehensive study of surface geomorphic processes.

A New Perspective UBC Press

From the symposium to honor Dr. Stanley Schumm, a pioneer in the field of fluvial geomorphology. Included are topics that address primary fluvial processes, extreme events, anthropogenic effects on fluvial systems, applied fluvial geomorphology, and engineering geomorphology.

Catchment Experiments in Fluvial Geomorphology John Wiley & Sons

Experiments in Reduced Gravity: Sediment Settling on Mars is the first book to be published that reflects experiments conducted on Martian geomorphology in reduced gravity. This brief yet important book on sediment experiments assesses the theoretical and empirical foundation of the models used to analyze the increasing information we have on the past geography on Mars. The book also evaluates the need to develop new methods for analyzing new information by providing a conceptual outline and a case study on how experiments can be used to test current theoretical considerations. The conceptual approach to identifying the need for and role of experiments will be of interest to planetary scientists and geoscientists not necessarily involved with Mars, but those using experiments in their research who can apply the book’s concepts. Includes figures, diagrams, illustrations, and photographs to vividly explore experiments and outcomes in reduced gravity Provides an outline of planned experiments and questions related to Martian geomorphology Features results from the MarsSedEx 1 Experiment in 2012

Proceedings of a Meeting of the International Geographical Union Commission on Field Experiments in Geomorphology, Exeter and Huddersfield, UK, August 16-24, 1981 John Wiley & Sons

Rivers differ among themselves and through time. An individual river can vary significantly downstream, changing its dimensions and pattern dramatically over a short distance. If hydrology and hydraulics were the primary controls on the morphology and behaviour of large rivers, we would expect long reaches of rivers to maintain characteristic and relatively uniform morphologies. In fact, this is not the case - the variability of large rivers indicates that other important factors are involved. River Variability and Complexity presents an interesting approach to the understanding of river variability. It provides examples of river variability and explains the reasons for them, including fluvial response to human activities. Understanding the mechanisms of variability is important for geomorphologists, geologists, river engineers and sedimentologists as they attempt to interpret ancient fluvial deposits or anticipate river behaviour at different locations and through time. This book provides an excellent background for graduates, researchers and professionals.

Soil Geomorphology CRC Press

Geomorphology is a discipline which has traditionally been dominated by fieldwork. This volume is devoted to the philosophical and methodological components of the discipline. Its purpose is to provide a comprehensive examination of contemporary perspectives on the scientific nature of geomorphology. The book should help unify and strengthen the disciplines by clarifying how geomorphology fits into the realm of the sciences, by examining its relationship to other sciences, by providing an improved understanding of methodological diversity in the discipline, and by identifying potential bases for disciplinary unity.

Related with Experimental Fluvial Geomorphology:

• Examen Ciudadania En Ingles : click here