1. Record Nr. UNINA9910557366103321

Autore	Descroix Luc
Titolo	Multiscale Impacts of Anthropogenic and Climate Changes on Tropical and Mediterranean Hydrology
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 online resource (372 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The atmospheric part of the water cycle is accelerating, affecting hydrological dynamics, especially in tropical and Mediterranean areas, where landscapes, soils and territories are particularly vulnerable to global warming and land use changes. Across four continents and a dozen of different regions or basins, this SI strives to highlight the environmental and societal vulnerabilities and their links with the water cycle. The basins of three of the greatest basins in the world in terms of streamflows-the Amazon River, the Orinoco River and the Congo River-show their unexpected behaviors. This book aims to present past and present status to improve future land and water management.

2. Record Nr. UNINA9910566480403321

Autore	Quirce Ana
Titolo	Nonlinear Dynamics of Semiconductor Lasers and Their Applications
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 online resource (212 p.)
Soggetti	Optical physics Physics Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Semiconductor lasers are key components in many optical systems due to their advantages, including their small size, low cost, high efficiency, and low power consumption. It is well-known that semiconductor lasers under external perturbations, such as optical injection, optical feedback, or delayed coupling can exhibit a large variety of complex dynamical behaviors. Nowadays, cutting-edge engineering applications based on the complex dynamics of diode lasers are being conducted in areas, such as optical communications, optical signal processing, encoded communications, neuro-inspired ultra-fast optical computing devices, microwave signal generation, RADAR and LIDAR applications, biomedical imaging, and broadband spectroscopy. The prospects for these applications are even more exciting with the advent of photonic integrated circuits. This Special Issue focuses on theoretical and experimental advances in the nonlinear dynamics of semiconductor lasers subject to different types of external perturbations.