1. Record Nr. UNINA9910557565703321 Autore Di Prima Simone Titolo Soil Hydrology for a Sustainable Land Management: Theory and Practice Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (222 p.) Soggetti Research & information: general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Soil hydrology determines the water-soil-plant interactions in the Earth' s system because porous medium acts as an interface within the atmosphere and lithosphere; regulates main processes such as runoff discharge, aguifer recharge, movement of water, and solutes into the soil; and ultimately the amount of water retained and available for plants growth. Soil hydrology can be strongly affected by land management. Therefore, investigations aimed at assessing the impact of land management changes on soil hydrology are necessary, especially to optimize water resources. This Special Issue collects 12 original contributions addressing the state-of-the-art advances in soil hydrology for sustainable land management. These contributions cover a wide range of topics including (i) the effects of land use change, (ii) water use efficiency, (iii) erosion risk, (iv) solute transport, and (v) new methods and devices for improved characterization of soil physical and hydraulic properties. They include both field and laboratory experiments as well as modelling studies. Different spatial scales, i.e., from field to regional scales, and a wide range of geographic regions

are also covered. The collection of these manuscripts presented in this Special Issue provides a relevant knowledge contribution for effective

saving water resources and sustainable land management.