

1. Record Nr.	UNINA9910746089303321
Titolo	Smart and sustainable urban ecosystems : challenges and solutions : proceedings of Smart and Sustainable Cities 2022 // edited by Maria Korneykova, Viacheslav Vasenev, Elvira Dovletyarova, Riccardo Valentini, Sergey Gorbov, Denis Vinnikov, Diana Dushkova
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	3-031-37216-6
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (xiii, 316 pages) : illustrations (some color)
Collana	Springer Geography, , 2194-3168
Altri autori (Persone)	KorneykovaMaria VasenevViacheslav I DovletyarovaElvira ValentiniR <1959-> (Riccardo) GorbovSergey VinnikovDenis DushkovaDiana
Disciplina	307.760285
Soggetti	City planning - Environmental aspects Megacities - Environmental aspects Smart cities
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Hydrocarbon Content and Enzymatic Activity of Urban Soils in Kola Subarctic -- Acute and Chronic Phytotoxicity of Subarctic Urban Soils and Industrial Wastes -- The Ecotoxicological State of Urban Soils of the Saint-Petersburg City -- Assessment of Soil Quality in Urban Green Areas of Two Russian Cities by Means of Chemical and Biological Methods -- Assessment of Urban Soil Pollution by Heavy Metals (Russian Federation, Republic of Bashkortostan) -- Distribution of Microelements in the Mineral Part of Chernozems under Different Types of Plant Communities in the Rostov Agglomeration -- Seasonal Dynamics of Mobile Phosphorus and Potassium in Podzol Soils Within Slope Catena of Different Anthropogenic Load at the RSAU-MTAA Forest Experimental Station -- Grazing Effect on Carbon Stocks and Fluxes in Soils of the Mountainous Pastures -- Ecosystem Services and

Ecological State of Postpyrogenic Soils in Urban Forest Environments --
The Dynamics Peculiarities of the Xylem Sap of Coniferous Woody
Plants on the Example of Picea Abies in Rostov-on-Don -- Daily and
Seasonal Dynamics of Mixed Forest Biodiversity in the Moscow Region
According to Acoustic Monitoring Data -- A Tremendous Green Roof or
Biodiversity Museum? First Outcomes from Soil Survey in Zaryadye Park.

Sommario/riassunto

This book provides multidisciplinary approaches to smart and sustainable urban ecosystems. Urbanization is a global tendency, and up to 70% of the world population is projected to live in cities by 2050. How will this rapid urbanization alter the face of the world? What are the environmental consequences of megacities' expansion? What are smart solutions to make life in cities safe, comfortable, and environmentally friendly? These and other important questions are addressed by the conference Smart and Sustainable Cities (SSC). This year's theme for the conference will be « Sustainable urban ecosystems: challenges and solutions». Megapolises are complex ecosystems. Air and water quality, vegetation, and soils in megapolises are exposed to anthropogenic influence. Studying negative environmental consequences of the anthropogenic and technogenic pressures is among the key tasks of urban ecology and environmental impact assessment. Advanced approaches and smart technologies to monitor, model, and assess environmental consequences and risks in megapolises will be widely discussed at the conference. Searching for solutions of the environmental problems of modern megapolises will be the key point of the conference. Successful experiences of sustainable urban development and nature-based solutions to support climate adaptation, carbon neutrality, and human health will be presented in the conference proceedings.
