1. Record Nr. UNINA9910686783603321

Titolo	Advances in Natural, Human-Made, and Coupled Human-Natural Systems Research [[electronic resource]] : Volume 2 / / edited by Svetlana G. Maximova, Roman I. Raikin, Alexander A. Chibilev, Marina M. Silantyeva
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-030-78083-X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource
Collana	Lecture Notes in Networks and Systems, , 2367-3389 ; ; 250
Disciplina	006.3
Soggetti	Computational intelligence Environmental sciences—Social aspects Economic development Control engineering Computational Intelligence Environmental Social Sciences Development Studies Control and Systems Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Comfort Potential and Development Prospects of Cities in the Steppe Zone of Russia Using the Index Method -- Water Resources of Transboundary Rivers in the Steppe Zone under Modern Hydroclimatic Conditions -- Ecological-economical Security in the Steppe Regions of Russia -- Developing Institutional Support for Rational Steppe Land Use -- The Role of Late Pleistocene Permafrost Processes in the Formation of Thufurs in the Southern Cis-Urals Steppe -- Natural Fires in the Steppe Regions of Russia: Causing Factors and Detection Experience -- Dynamics of Erosion Processes in Steppe Landscapes Caused by Agricultural and Oil Production -- Challenges in Developing Ecological and Economic Areas in the Mountainous Region of the Greater Altai, Russia -- The Integrated Regulation of a Cyber-Physical System -- The Resource Availability and Resource Dependence of Yakutia, a Russian

Economic region. .

Sommario/riassunto

This book is a unique collection of advanced research on natural, human-made, and coupled human–natural systems. The contributors analyze the current state of knowledge, address methodological challenges, and explore engaging cases. The chapters demonstrate the balanced disciplinary strength and discuss interdisciplinary perspectives. The authors undertake a holistic and spatially integrative analysis to understand the sustainability of environmental, economic, and social systems, emphasizing the coupled nature of such systems. In particular, the chapters explore biodiversity conservation and natural resources, the sustainability of natural and human-altered ecosystems, sustainability–vulnerability issues in coupled human–natural systems, mechanisms to foster sustainable environmental practices, eventually accumulating sustainability research and practice in various fields. More than that, the challenges of educational and economic systems are studied closely. The authors rely on unique data, develop regional and local knowledge, and explore global trends at local scales. A separate focus is devoted to human health and well-being. The book has seven sections: (1) Advances in Natural and Coupled Human–Natural Systems Research; (2) Economic Systems in the Age of Digital Changes and Unstable Environments; (3) Sustainable Social Systems, Migration Flows, and Social Cohesion; (4) Taking Action for Greater Security and Effective Partnerships for Sustainable Development; (5) Systemic Challenges and Changes in Education Systems in Russia and Around the Globe; (6) Advances in Cultural Traditions and Innovation, Development Barriers, and Social Stability; (7) Human Health and Well-being: Taking Action for Sustainable Development. Written by scholars and practitioners from multiple fields of knowledge, the book is designed for a broader audience interested in the following research areas: systems research and thinking, sustainability research and thinking, system dynamics, management of complexity, decision analysis, organization theory, governance, natural resources, environmental studies, economic development, social policies, cleaner production, innovation, cultural studies, and sustainable practices.