1. Record Nr. UNINA9910728395203321

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Titolo	Constructive Processing of Microwave and Optical Data for Hydrogeochemical Applications / / by Costas A. Varotsos, Vladimir F. Krapivin, Ferdenant A. Mkrtchyan, Yong Xue
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-28877-7
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (531 pages)
Disciplina	551.48
Soggetti	Environmental monitoring Geochemistry Water Hydrology Refuse and refuse disposal Environmental Monitoring Waste Management/Waste Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1-Global Ecodynamics and Hydrogeochemistry Problems -- 2-Global Water Balance and Pollution of Water Reservoirs -- 3-Remote Sensing Technologies and Water Resources Monitoring -- 4-Optical Tools for Water Quality Monitoring -- 5-Arctic Basin Pollution -- 6-Investigation of Regional Aquatic Systems -- 7-Global Climate Change and Hydrogeochemistry.
Sommario/riassunto	This book presents results of the combined use of microwave remote sensing, optical tools, and ecoinformatics methods under solution-applied tasks at both regional and global scales. Ecoinformatics methods are used to assess links between global climate change and the level of ocean pollution, with specific focus on the Arctic Ocean, the Sea of Okhotsk, and the South-China Sea. The theoretical and applied aspects of instrumental tools are considered in this book as a basis for the monitoring of water quality in various watersheds, with particular attention to microwave remote sensing monitoring data to determine

the ecotoxicological status of hydro-ecosystems affected by climate change. The book develops new information technologies that provide solutions for hydrochemical tasks using algorithms and models based on computer technologies for big data processing. This will help to synthesize effective computer-based systems for the solution of problems arising due to anthropogenic impacts on hydrological processes and objects at various spatial scales. This book is intended for specialists in the fields of environmental monitoring, climate change, human-nature interactions, and geopolitics. The book will be useful for undergraduate and postgraduate students studying these fields of science as well.