

1. Record Nr.	UNINA9910483112903321
Titolo	Spatial modeling and assessment of environmental contaminants : risk assessment and remediation // Pravat Kumar Shit, Partha Pratim Adhikary, Debashish Sengupta, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
ISBN	3-030-63422-1
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XX, 720 p. 225 illus., 185 illus. in color.)
Collana	Environmental Challenges and Solutions, , 2214-2827
Disciplina	628.50287
Soggetti	Pollution - Measurement
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I. Soil and Sediment Contaminants, Risk Assessment and Remediation -- Chapter 1. Introduction to Part I: Soil and Sediment Contaminants, Risk Assessment and Remediation -- Chapter 2. Combating Arsenic Pollution in Soil Environment via Alternate Agricultural Land Use -- Chapter 3. Temporal and Seasonal Variation in Leachate Pollution Index (LPI) in Sanitary Landfill Sites- A Case study of Baidyabati landfill, West Bengal, India -- Chapter 4. Quantification of Landfill Gas Emission and Energy Recovery Potential: A Comparative Assessment of LandGEM and MTM Model for Kolkata -- Chapter 5. Assessment of natural enrichment of heavy minerals along coastal placers of India: Role of lake and river mouth embayment and its implications -- Chapter 6. Assessment the Impact of Plastic Contaminated Fertilizers on Agricultural Soil Health: A Case Study in Memari II C.D.Block, Purba Bardhaman, West Bengal, India -- Chapter 7. Determining the Role of Leaf Relative Water Content and Soil Cation Exchange Capacity in Phytoextraction Process – Using Regression Modelling -- Chapter 8. Phytoremediation of Arsenic using Allium sativum as Model System -- Chapter 9. Spatio-temporal analysis of open waste dumping sites using Google Earth: A case study of Kharagpur City, India -- Part II. Water Contaminants, Risk Assessment and Remediation -- Chapter 10. Introduction to Part II: Water Contaminants, Risk Assessment and Remediation -- Chapter 11.

Groundwater Arsenic Contamination Zone based on geospatial modeling, risk and remediation -- Chapter 12. Geospatial assessment of surface water pollution and industrial activities in Ibadan, Nigeria -- Chapter 13. Aquaculture-based water quality assessment and risk remediation along the Rasulpur River belt, West Bengal -- Chapter 14. Heavy Metal Contamination in Groundwater and Impact on Plant and Human -- Chapter 15. Emerging Threats of Microplastic contaminant in freshwater environment -- Chapter 16. Exploring Particle Size Transport Variability of Suspended Sediments in two Alpine Catchments over the Lesser Himalayan Region, India -- Chapter 17. Salinity and corrosion potential of groundwater in Mewat district of Haryana, India -- Chapter 18. Threats to quality in the coasts of the Black Sea: heavy metal pollution of seawater, sediment, macro-algae and sea-grass -- Chapter 19. Geospatial assessment of groundwater quality for drinking through Water Quality Index and Human Health Risk Index in an upland area of Chotanagpur Plateau of West Bengal, India -- Chapter 20. Existence of Pharmaceuticals and Personal Care Products (PPCPs) in the conventional water treatment process -- Chapter 21. Arsenic-rich surface and groundwater around eastern parts of Rupnagar district, Punjab, India -- Part III. Environmental Contaminants, Impacts and Sustainable Management -- Chapter 22. Introduction to Part III: Environmental Contaminants, Risk Assessment and Remediation -- Chapter 23. Dynamics of ultra-fine particles in indoor and outdoor environments: a modelling approach to study the evolution of particle characteristics -- Chapter 24. Environmental impacts of coal-mining and coal-fired power-plant activities in a developing country with global context -- Chapter 25. Overview of Indoor air pollution: A human health perspective -- Chapter 26. Mineralogy and Morphological characterization of Technogenic Magnetic Particles (TMP) from industrial dust: Insights into environmental implications -- Chapter 27. Pesticides: Recent Updates on Types Toxicity and Bioremediation Strategies -- Chapter 28. Commonly available plant neem (*Azadirachta indica* A. Juss) ameliorates dimethoate induced toxicity in climbing perch *Anabas testudineus* -- Chapter 29. Estimating Particulate Matter concentrations from MODIS AOD considering meteorological parameters using Random Forest Algorithm -- Chapter 30 Bio-monitoring and bioremediation of a trans-boundary river in India: Functional roles of benthic mollusks and fungi -- Chapter 31 Assessing the Maximum Aerobic Biodegradation Potential of Leaf Litter, an Organic Fraction of Municipal Solid Waste, Under Optimum Nutrient Conditions -- Chapter 32. Rising trend of air pollution and its decadal consequences on meteorology and thermal comfort over Gangetic West Bengal, India.

Sommario/riassunto

This book demonstrates the measurement, monitoring and mapping of environmental contaminants in soil & sediment, surface & groundwater and atmosphere. This book explores state-of-art techniques based on methodological and modeling in modern geospatial techniques specifically focusing on the recent trends in data mining techniques and robust modeling. It also presents modifications of and improvements to existing control technologies for remediation of environmental contaminants. In addition, it includes three separate sections on contaminants, risk assessment and remediation of different existing and emerging pollutants. It covers major topics such as: Radioactive Wastes, Solid and Hazardous Wastes, Heavy Metal Contaminants, Arsenic Contaminants, Microplastic Pollution, Microbiology of Soil and Sediments, Soil Salinity and Sodicity, Aquatic Ecotoxicity Assessment, Fluoride Contamination, Hydrochemistry, Geochemistry, Indoor Pollution and Human Health aspects. The content

of this book will be of interest to researchers, professionals, and policymakers whose work involves environmental contaminants and related solutions.
