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	Titolo	Modelling Trends in Solid and Hazardous Waste Management [[electronic resource] /] / edited by Debashish Sengupta, Sudha Agrahari
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	Nota di contenuto	Chapter 1. Radioactive Waste Disposal of Medical Waste -- Chapter 2. Heavy Metal/Radionuclide Contaminant Migration in the Vicinity of Thermal Power Plants: Monitoring, Remediation and Utilization -- Chapter 3. Legislative Framework for Solid Waste Management in India and USA -- Chapter 4. A Review of Solid Waste Management Models: Prediction, Optimization and Cost -- Chapter 5. Shale Gas: Hydrofracking, its Effects and Possible Remediation -- Chapter 6. Characterization and Motoring of Solid Waste Disposal Sites Using Geophysical Methods: Current Applications and Novel Trends -- Chapter 7. Uranium Resource Development and Sustainability – Indian Case Study -- Chapter 8. Recent Trends in Management of Hazardous Waste -- Chapter 9. The Change from Aerobic to Anaerobic Landfilling and the Increase of Correspondent Emissions and Expenses -- Chapter 10. Microbial Fuel Cells in Solid Waste Valorization: Trends and Applications.
	Sommario/riassunto	This book explores state-of-art techniques based on methodological

and modeling aspects of solid and hazardous waste management, specifically focusing on the recent trends in data acquisition and robust modeling of the results obtained. In addition to an in-depth description of the recent regulatory paradigm for solid waste disposal and revealing insights into solid waste management models, the book also addresses significant case history and remediation methodologies for sustainable development in emerging economies like India, China and Brazil. The main emphasis is on a suitable regulatory framework with site-specific baseline calibration and aimed at the robust modeling of contaminant transport and its remediation. This is based on instructive case history in various locations/regions worldwide. The focus on recent modeling and quantification methods is the backbone of the book. One of the major aspects discussed is the application of non-invasive methods for studies related to the Earth's interior, which are increasingly preferred over invasive techniques thanks to their economic utility, as well as robust techniques for the interpretation of geophysical data. The increasing demand for groundwater and energy resources, especially for rapidly emerging countries with large populations like India and China, has made it vital to derive safe utilization approaches for our resources, including suitable waste disposal and remediation methodologies that can be adopted for 'contaminated sites.'.