

1. Record Nr.	UNINA9910586636103321
Titolo	Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment : Sustainable Solid Waste Management: Waste to Wealth / / edited by Pankaj Pathak, Sankar Ganesh Palani
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-07785-7
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (x, 267 pages) : illustrations
Collana	Radionuclides and Heavy Metals in the Environment, , 2524-7417
Altri autori (Persone)	PathakPankaj
Disciplina	669.0283 628.44564
Soggetti	Refuse and refuse disposal Ecology Environmental management Environmental policy Environmental economics Waste Management/Waste Technology Environmental Sciences Environmental Management Environmental Policy Environmental Economics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Solid waste management and landfill in high-income countries -- 2. Landfill mining: significance, operation and global perspectives -- 3. Open dumps and circular economy: Assessing landfill mining potential, benefits and challenges for Indian dumpsites -- 4. Environmental issues due to open dumping and landfilling -- 5. Molecular tools- A future perspective approach for monitoring landfill leachates and validating bioremediation process -- 6. An Overview of Physicochemical and Biological Treatment of Landfill Leachate -- 7. Advancements in operation of bioreactor landfills for enhanced biodegradation of municipal solid waste -- 8. Anaerobic co-digestion of landfill leachate with other feedstocks -- 9. Anaerobic ammonia

oxidation enrichment to enhance landfill leachate treatment -- 10. Valorization of inert solid waste from landfill activities -- 11. Biomined and Fresh Municipal Solid Waste as Sources of Refuse Derived Fuel -- 12. Recovery of Metal Values by Treating the Municipal Solid Waste Incineration Ashes.

Sommario/riassunto

This book will serve as a ready reckoner of contemporary information regarding municipal solid waste landfill biomining, treatment of landfill leachate and heavy metals in a single platform. The academicians, researchers, and students at master's and doctoral levels will be able to understand the current trends in municipal solid waste landfill operations, which will help in augmenting their research. Construction of new landfills requires huge monetary investments, which can be avoided if old landfills were bio-mined for resources and the space can be re-used as new landfills. Landfill leachate is a hazardous waste which needs proper treatment that could generate value-added products such as clean energy and biofertilizers. In this book, each chapter would provide the background, methodology, and relevant calculations for sustaining landfill operations. Also, the case studies based on best practices in municipal solid waste landfilling are discussed in this book.