

1. Record Nr.	UNINA9911020233703321
Autore	Deshmukh Kalim
Titolo	Plastic Waste Management : Methods and Applications
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	9783527842209 3527842209 9783527842186 3527842187
Edizione	[1st ed.]
Descrizione fisica	1 online resource (448 pages)
Altri autori (Persone)	ParameswaranpillaiJyotishkumar
Soggetti	Sustainable development Recycling (Waste, etc.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Preface -- 1 Introduction to Plastic Wastes: Processing Methods, Environmental and Health Implications -- 1.1 Introduction -- 1.2 Plastic materials: Composition and Classification -- 1.2.1 Thermoplastics -- 1.2.2 Thermosets -- 1.3 Techniques of Plastic Processing -- 1.3.1 Primary Techniques -- 1.3.2 Secondary Techniques -- 1.4 Global Plastic Production -- 1.5 The Health and Environmental Effects of Plastic Debris -- 1.5.1 Plastic Debris and Microplastics -- 1.5.2 Plastic Effects on Human Health -- 1.5.3 Plastic and Climate Change -- 1.6 Management Strategies for Plastic Debris -- 1.6.1 Improving 4R Concept -- 1.6.2 Landfills -- 1.6.3 Development of Cleanup Technologies -- 1.7 Conclusion -- References -- 2 Management Strategies for Plastic Wastes: A Roadmap Toward Circular Economy and Environmental Sustainability -- 2.1 Introduction -- 2.2 Waste Plastics Management Strategies -- 2.2.1 Recycling -- 2.2.2 Pyrolysis -- 2.2.2.1 Challenges Associated with the Pyrolysis Process
Sommario/riassunto	This book explores the challenges and strategies of managing plastic waste, with a focus on sustainable development and circular economy

principles. Edited by Kalim Deshmukh and Jyotishkumar, it covers various topics including plastic processing methods, environmental and health impacts, and innovative waste management techniques. It discusses the global production of plastics, the health effects of plastic debris, and management strategies like recycling and pyrolysis. The book is intended for professionals and researchers in environmental science and waste management, aiming to provide insights into overcoming barriers in waste collection systems and promoting sustainable practices.
