1. Record Nr. UNINA9911007102303321

Autore	Varjani Sunita
Titolo	Current Developments in Biotechnology and Bioengineering : Emerging Organic Micro-pollutants / Varjani, Sunita [and others]
Pubbl/distr/stampa	San Diego, CA, USA, : Elsevier Science, 2020
ISBN	9780128195949 0128195940
Descrizione fisica	1 online resource
Altri autori (Persone)	PandeyAshok TyagiR. D
Soggetti	Micropollutants Organic water pollutants Sewage - Purification Bioengineering Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Section 1: Resource recovery from industrial wastewater 1.1: Energy Recovery of methane from wastewaters Bioelectricity generation from industrial effluents using microbial fuel Cells Biohydrogen 1.2: Bioproducts Bacterial bioflocculant from starch industrial wastewater Exopolysacchirides Recovery of chitosan from natural biotic wastes 1.3: Nutrients Nitrogen recovery Phosphorus recovery Section 2: Resource recovery from solid wastes 2.1: Municipal and food wastes Bio-based products from municipal and industrial wastes Recovery of clean renewable energy from municipal solid waste Biopolymers from food waste Resource recovery from inert municipal wastes Phosphorus recovery from incinerated sewage sludge ash Bioeconomy of Municipal Solid Waste using Gas fermentation 2.2: Electronic wastes Recovery of gold from electronic wastes Resource recovery from button cell battery waste 2.3: Agricultural waste Recovery of energy, nutrients and water resources from agriculture and aquaculture wastes Energy recovery from agri-biomass using gasification Valorization of lignocellulosic-based wastes Recovery of high value products from sugarcane industry

	wastes 2.4: Others Recovery of minerals from low-grade ores Bio-oil recovery from plastic waste Bioleaching and bio mining
Sommario/riassunto	Current Developments in Biotechnology and Bioengineering: Emerging Organic Micropollutants summarizes the current knowledge of emerging organic micropollutants in wastewater and the possibilities of their removal/elimination. This book attempts a thorough and exhaustive discussion on ongoing research and future perspectives on advanced treatment methods and future directions to maintain and protect the environment through microbiological, nanotechnological, application of membrane technology, molecular biological and by policymaking means. In addition, the book includes the latest developments in biotechnology and bioengineering pertaining to various aspects in the field of emerging organic micropollutants, including their sources, health effects and environmental impacts.