

1. Record Nr.	UNINA9910886069503321
Titolo	Advanced Materials and Conversion Technologies for Personal Protective Equipment Used in the COVID-19 Pandemic // edited by Suresh Sundaramurthy, Sarika Verma, Avanish Kumar Srivastava
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819746927 9819746922
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (203 pages)
Collana	Materials Horizons: From Nature to Nanomaterials, , 2524-5392
Disciplina	687.162
Soggetti	Biomaterials Materials - Analysis Materials Biomedical Materials Materials Characterization Technique Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Impact of PPEs waste generation during COVID-19 pandemic on the environmental sustainability and its economic aspects in India and Worldwide -- Circular economy for advanced materials from used PPEs—state of the art initiatives and regulatory issues -- Conversion Technologies, sustainability, reuse and end of life materials from PPEs used in COVID-19 Pandemic -- Microwave and plasma conversion technologies for used PPEs -- Advanced conversion technologies and their recent research trends.
Sommario/riassunto	This book provides an overview of the latest research on COVID-19 antiviral personal protective equipment (PPE), including safety, handling, and disposal. It also examines a range of durable, energy-efficient, and next-generation construction and building materials and energy fuel storage applications produced from PPE wastes. The topics covered include impact of PPE waste generation during COVID-19 pandemic on the environmental sustainability and its economic aspects, circular economy for advanced materials from used PPEs,

conversion technologies, sustainability, reuse, and end of life materials from PPEs used in COVID-19 pandemic and microwave and plasma conversion technologies for used PPEs. The book also discusses thermo-chemical conversion technologies, various properties, and performance attributes. The book is a valuable reference for researchers and professionals in the areas of material science. It also proves as a valuable resource for policymakers and administrators involved in regulatory aspects of PPE kits.
