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Titolo	Air Pollution and Control // edited by Nikhil Sharma, Avinash Kumar Agarwal, Peter Eastwood, Tarun Gupta, Akhilendra P Singh
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ISBN	981-10-7185-3
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Descrizione fisica	1 online resource (XIV, 260 p. 120 illus., 58 illus. in color.)
Collana	Energy, Environment, and Sustainability, , 2522-8366
Disciplina	363.7392
Soggetti	Air pollution Fossil fuels Automotive engineering Atmospheric Protection/Air Quality Control/Air Pollution Fossil Fuels (incl. Carbon Capture) Automotive Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I General -- Introduction to Air pollution and Its Control -- Part II Internal Combustion Engine -- Simultaneous Control of Oxides of Nitrogen and Soot in CRDI Diesel Engine using Split Injection and Cool EGR Fuelled with Waste Frying oil Biodiesel and its Blend -- Biodiesel Soot Characteristics -- Techniques to Control Emissions from a Diesel Engine -- BS-III Diesel Vehicles in Imphal, India: An emission Perspective -- Gasoline Direct Injection Engines Technology and Particulate Emission -- Part III Particulate and Aerosols -- Primary Organic Aerosols -- Effects of VOCs on Human Health -- Thermodynamics of Carbon Nanotubes and Soot Formation -- Part IV Numerical/ Simulations -- A Study on Evolution and Modelling of Soot Formation in Diesel Jet Flames -- Numerical Simulation of Air Pollution Control in Hospital -- Part V Miscellaneous -- A Review on Clean Combustion Within Porous Media -- An Overview of Current Knowledge Concerning the Environmental Consequences of the Nuclear Pollution: Sources, Effects and Control -- Scope of Pyrolysis Process as a Sustainable Method to Dispose Waste Tires: A Review.
Sommario/riassunto	This book focuses on various aspects related to air pollution, including

major sources of air pollution, measurement techniques, modeling studies and solution approaches to control. The book also presents case studies on measuring air pollution in major urban areas, such as Delhi, India. The book examines vehicles as a source of air pollution and addresses the quantitative analysis of engine exhaust emissions. Subsequent chapters discuss particulate matter from engines and coal-fired power plants as a major pollutant, as well as emission control techniques using various after treatment systems. The book's final chapter considers future perspectives and a way forward for sustainable development. It also discusses several emission control techniques that will gain relevance in the future, when stricter emission norms will be enforced for international combustion (IC) engines as well as power plants. Given its breadth of coverage, the book will benefit a wide variety of readers, including researchers, professionals, and policymakers.
