
Contents

Air Pollution and Health Effects	1
Ana Isabel Miranda, Joana Valente, Ana Margarida Costa, Myriam Lopes, and Carlos Borrego	
Air Pollution from Mobile Sources: Formation and Effects and Abatement Strategies	15
Neal Hickey, Ilan Boscarato, and Jan Kaspar	
Air Quality Modelling and Its Applications	45
Isabel Ribeiro, Joana Valente, Jorge Humberto Amorim, Ana Isabel Miranda, Myriam Lopes, Carlos Borrego, and Alexandra Monteiro	
Fuel Cell Technology and Materials	57
Lorenzo Pisani, Bruno D'Aguanno, Vito Di Noto, and John Andrews	
Engineering Aspects Related to the Use of Microalgae for Biofuel Production and CO₂ Capture from Flue Gases	73
Alessandro Concas, Massimo Pisu, and Giacomo Cao	
Concentrating Solar Energy Technologies	113
Erminia Leonardi and Bruno D'Aguanno	
Probiotics for Environmental Sanitation: Goals and Examples	127
Mikhail Vainshtein	
Dust Removal and Collection Techniques	137
Mostafa Maalmi	
The Role of Catabolic Plasmids in Biodegradation of Petroleum Hydrocarbons	159
Alexander M. Boronin and Irina A. Kosheleva	
On the Exploitation of Self-Propagating High-Temperature Reactions for Environmental Protection	169
Roberto Orrù and Giacomo Cao	
Glyphosate: Safety Risks, Biodegradation, and Bioremediation	183
A.V. Sviridov, T.V. Shushkova, I.T. Ermakova, E.V. Ivanova, and A.A. Leontievsky	
Bioleaching of Metals as Eco-friendly Technology	197
Mikhail Vainshtein	
Biodiversity	207
Georgia Valaoras	

Passive Sampling Technologies for the Monitoring of Organic and Inorganic Contaminants in Seawater	217
Marco Schintu, Alessandro Marrucci, and Barbara Marras	
A Review of Green Business	239
Theoharis Tziovaras and Georgia Valaoras	
Grid/Cloud Computing as New Paradigm for Collaborative Problem Solving and Shared Resources Management in Environmental Sciences	249
Z. Heilmann, G.P. Deidda, G. Satta, A. Vargiu, L. Massidda, and M. Marrocu	

Current Environmental Issues and Challenges

Cao, G.; Orrù, R. (Eds.)

2014, VIII, 278 p. 152 illus., 97 illus. in color., Hardcover

ISBN: 978-94-017-8776-5