

1. Record Nr.	UNINA9910299303703321
Autore	Zhang Lei
Titolo	Electronic Nose: Algorithmic Challenges [[electronic resource] /] / by Lei Zhang, Fengchun Tian, David Zhang
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-13-2167-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (339 pages)
Disciplina	612.86
Soggetti	Optical pattern recognition Biometrics Bioinformatics Medical records - Data processing Pattern Recognition Computational Biology/Bioinformatics Health Informatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1 : Overview -- Chapter 1. Introduction -- Chapter 2. Literature Review -- Part 2 : E-nose Odor Recognition and Prediction: Challenge I -- Chapter 3. Heuristic and Bio-inspired Neural Network Model -- Chapter 4. Chaos based Neural Network Optimization Approach -- Chapter 5. Multilayer Perceptrons based Concentration Estimation, etc.
Sommario/riassunto	This book presents the key technology of electronic noses, and systematically describes how e-noses can be used to automatically analyse odours. Appealing to readers from the fields of artificial intelligence, computer science, electrical engineering, electronics, and instrumentation science, it addresses three main areas: First, readers will learn how to apply machine learning, pattern recognition and signal processing algorithms to real perception tasks. Second, they will be shown how to make their algorithms match their systems once the algorithms don't work because of the limitation of hardware resources. Third, readers will learn how to make schemes and solutions when the acquired data from their systems is not stable due to the fundamental issues affecting perceptron devices (e.g. sensors). In brief, the book

presents and discusses the key technologies and new algorithmic challenges in electronic noses and artificial olfaction. The goal is to promote the industrial application of electronic nose technology in environmental detection, medical diagnosis, food quality control, explosive detection, etc. and to highlight the scientific advances in artificial olfaction and artificial intelligence. The book offers a good reference guide for newcomers to the topic of electronic noses, because it refers to the basic principles and algorithms. At the same time, it clearly presents the key challenges – such as long-term drift, signal uniqueness, and disturbance – and effective and efficient solutions, making it equally valuable for researchers engaged in the science and engineering of sensors, instruments, chemometrics, etc.

2. Record Nr.	UNINA9910463882003321
Autore	Uekotter Frank <1970->
Titolo	The age of smoke : environmental policy in Germany and the United States, 1880-1970 // Frank Uekoetter
Pubbl/distr/stampa	Pittsburgh, Pennsylvania : , : University of Pittsburgh Press, , 2009 ©2009
ISBN	1-322-09644-9 0-8229-7350-2
Descrizione fisica	1 online resource (361 p.)
Collana	History of the Urban Environment
Disciplina	363.738/70943
Soggetti	Air - Pollution - Germany - History Air - Pollution - United States - History Air quality management - Germany - History Air quality management - United States - History Smoke prevention - Germany - History Smoke prevention - United States - History Environmental policy - Germany - History Environmental policy - United States - History Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.

Nota di bibliografia

Includes bibliographical references (p. 273-340) and index.

Nota di contenuto

The age of smoke -- Modern times, modern problems : controlling smoke, 1880-1914 -- Pollutants and politics : air pollution control between the wars -- Beyond the pall of smoke -- Going local, going national : the postwar divergence of environmental policy -- Forerunners and pioneers -- Environmental revolutions and evolutions -- Conclusion : Was the environmental revolution necessary?