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Titolo	Emergency Guidance Methods and Strategies for Major Chemical Accidents / / by Wenmei Gai, Yunfeng Deng
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ISBN	981-19-4128-9
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (139 pages)
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Soggetti	Environmental chemistry Chemicals - Safety measures Financial risk management Industrial engineering Production engineering Operations research Management science Environmental Chemistry Chemical Safety Risk Management Industrial and Production Engineering Operations Research, Management Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Analysis of regional evacuation under conditions of major chemical accidents -- Evacuation behavior analysis of the public in major chemical accidents -- Analysis and modeling of regional evacuation process -- Study on evacuation route planning for major chemical accidents -- Design of evacuation guidance system.
Sommario/riassunto	This book serves as a great reference for engineering technicians and researchers in a wide range of fields, including emergency management, public safety science, risk management, emergency communication, and transportation optimization. This book carried out researches about the public emergency behavior guidance strategies and methods for major chemical accidents. They put forward the

classification model of emergency evacuation events, the selection of public emergency guidance strategies, the quantitative assessment of emergency response risk as well as the characteristics of sub-regional evacuation based on a wide range of theories, including safety engineering, social science, behavioral science, etc. Methods, such as case statistics and analysis, field research as well as modeling and simulation, were applied. Five chapters were covered by the book, including introduction of study background, statistics and analysis of hazardous chemical leakage accidents and emergency evacuation response in China in recent ten years, shelter-in-place risk assessment for high-pressure natural gas wells with hydrogen sulphide, dynamic emergency route planning, and characteristics analysis of sub-regional evacuation.