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Descrizione fisica	1 online resource (VII, 222 p. 56 illus., 45 illus. in color.)
Collana	Modeling and Simulation in Science, Engineering and Technology
Disciplina	003
Soggetti	System theory
Lingua di pubblicazione	Inglese
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Nota di contenuto	Behavioral Human Crowds -- Artificial Neural Networks for the Estimation of Pedestrian Interaction Forces -- High-statistics modeling of complex pedestrian avoidance scenarios -- Modelling Collective Behaviour: Insights and Applications from Crowd Psychology -- Crowd Dynamics through Conservation Laws -- The Fokker-Planck framework in the modelling of pedestrians' motion -- Recent developments in controlled crowd dynamics -- Mathematical models and methods for crowd dynamics control -- Mixed Traffic Simulation of Cars and Pedestrians for Transportation Policy Assessment.
Sommario/riassunto	This contributed volume explores innovative research in the modeling, simulation, and control of crowd dynamics. Chapter authors approach the topic from the perspectives of mathematics, physics, engineering, and psychology, providing a comprehensive overview of the work carried out in this challenging interdisciplinary research field. After providing a critical analysis of the current state of the field and an overview of the current research perspectives, chapters focus on three main research areas: pedestrian interactions, crowd control, and multiscale modeling. Specific topics covered in this volume include: crowd dynamics through conservation laws recent developments in controlled crowd dynamics mixed traffic modeling insights and applications from crowd psychology Crowd Dynamics, Volume 2 is ideal for mathematicians, engineers, physicists, and other researchers working in the rapidly growing field of modeling and simulation of

human crowds.
