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| 1. Record Nr.           | UNINA9910484317303321   |
| Titolo                  | Crowd dynamics . Volume 2 : theory, models, and applications // Livio Gibelli, editor   |
| Pubbl/distr/stampa      | Cham, Switzerland : , : Birkhauser, , [2020]<br>©2020   |
| ISBN                    | 3-030-50450-6   |
| Edizione                | [1st ed. 2020.]   |
| 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   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| 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.

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