Record Nr. UNINA9910743235403321 Advances in Computational Modeling and Simulation / / edited by **Titolo** Rallapalli Srinivas, Rajesh Kumar, Mainak Dutta Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2022 **ISBN** 981-16-7857-X 981-16-7856-1 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (243 pages) Collana Lecture Notes in Mechanical Engineering, , 2195-4364 Disciplina 003.3 Soggetti Mathematics - Data processing Mathematical models Chemistry - Data processing Computational Science and Engineering Mathematical Modeling and Industrial Mathematics Computational Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Computation in Optimization and Control -- Multiscale and Nota di contenuto Multiphysics Modeling and Computation Analysis -- Environmental Modeling -- Modeling Approaches to Enterprise Systems and Services. The book presents select proceedings of Global meet on Sommario/riassunto 'Computational Modelling and Simulation, Recent Innovations, Challenges and Perspectives, 2020. This book covers leading-edge technologies from different domains such as computation in optimization and control, multiscale and multiphysics modeling and computation analysis, environmental modeling, modeling approaches to enterprise systems and services, finite element analysis, dependability and security, high-performance computation/cloud computing applications, computational biology and chemistry and computational mechanics. The primary goal of this book is to strengthen pre-eminence in computational modeling and simulation by catalyzing the transformative use of innovative developments in a wide range of disciplines to achieve lasting societal impact. The book

discusses on how to perform simulation of large complex dynamic

systems in an efficient manner using advanced computational analysis. The inter-disciplinary nature of the book would be a valuable reference for academicians and research scientists, industrialists interested in modelling and simulation driven by computational technology.