Record Nr. UNINA9910366621203321 Advances in Engineering Design and Simulation: Select Proceedings of Titolo NIRC 2018 / / edited by Chenfeng Li, U. Chandrasekhar, Godfrey Onwubolu Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-13-8468-1 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (xii, 345 pages): illustrations Lecture Notes on Multidisciplinary Industrial Engineering, , 2522-5022 Collana Disciplina 620.0042 Soggetti Manufactures Engineering design Fluid mechanics Computer-aided engineering **Physics** Manufacturing, Machines, Tools, Processes Engineering Design **Engineering Fluid Dynamics** Computer-Aided Engineering (CAD, CAE) and Design Numerical and Computational Physics, Simulation Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 1. Additive manufacturing -- 2. Design, optimization and allied themes -- 3. Structural analysis -- 4. Fatigue and fracture mechanics -- 5. Computational fluid dynamics -- 6. Multi-body and multiphysics simulation -- 7. Applications and case studies in aerospace, automotive, foundry, tooling, and manufacturing. This book consists of selected peer-reviewed papers presented at the Sommario/riassunto NAFEMS India Regional Conference (NIRC 2018). It covers current topics related to advances in computer aided design and manufacturing. The book focuses on the latest developments in engineering modelling and simulation, and its application to various complex engineering systems. Finite element method/finite element analysis, computational fluid dynamics, and additive manufacturing are some of the key topics

covered in this book. The book aims to provide a better understanding of contemporary product design and analyses, and hence will be useful for researchers, academicians, and professionals.