1. Record Nr. UNINA9910557612503321 Autore Masato Davide Titolo Advances in Micro and Nano Manufacturing: Process Modeling and **Applications** Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022 Pubbl/distr/stampa 1 electronic resource (204 p.) Descrizione fisica Soggetti Technology: general issues History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Micro- and nanomanufacturing technologies have been researched and developed in the industrial environment with the goal of supporting product miniaturization and the integration of new functionalities. The technological development of new materials and processing methods needs to be supported by predictive models which can simulate the interactions between materials, process states, and product properties. In comparison with the conventional manufacturing scale, micro- and nanoscale technologies require the study of different mechanical, thermal, and fluid dynamics, phenomena which need to be assessed and modeled. This Special Issue is dedicated to advances in the modeling of micro- and nanomanufacturing processes. The

development of new models, validation of state-of-the-art modeling strategies, and approaches to material model calibration are presented.

modeling and simulation in micro- and nanomanufacturing processes, promoting the diffusion and development of these technologies.

The goal is to provide state-of-the-art examples of the use of