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Nota di contenuto	Introduction -- Advance Reconnaissance and Optimal Monitoring -- Excavation Simulations and Cutting Tool Wear -- Face Support, Soil Conditioning and Material Transport in Earth-Pressure-Balance and Hydro Shield Machines -- Tunnel Linings -- Digital Design in Mechanized Tunneling -- Real-Time Simulation for Steering the Tunnel Construction Process.
Sommario/riassunto	This open access book compiles the research results of the Collaborative Research Center SFB 837, which has been running since 2010 and will end in 2022, with the topic "Interaction Modeling in Mechanized Tunneling". The Collaborative Research Center is funded by the German Research Foundation (DFG) and is currently the world's largest research facility in the field of tunneling. The aim of the publication is to make our scientific findings accessible to the international professional community. The individual chapters deal with all subsystems relevant in mechanized tunneling and their interaction.

The latest results of digital planning and real-time tunneling support have been included. The content Understand and improve the process of Machine Tunneling in all its aspects Digital Design in Mechanized Tunneling Real-Time Simulation for Steering the Tunnel Construction Process.
