1. Record Nr. UNINA9910366633503321 Autore Talalay Pavel G **Titolo** Thermal Ice Drilling Technology / / by Pavel G. Talalay Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-13-8848-2 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XII, 278 p. 348 illus., 176 illus. in color.) Springer Geophysics, , 2364-9119 Collana 550 Disciplina 526.1 Soggetti Geophysics Geotechnical engineering Geophysics/Geodesy Geotechnical Engineering & Applied Earth Sciences Polar Geography Polar regions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Hot-Point Drills -- Electric Thermal Coring Drills -- Hot-Water Ice Drills -- Steam Ice Drills -- Perspectives For Future Development of Thermal Ice-Drilling Technology. Sommario/riassunto This book provides a review of thermal ice drilling technologies. including the design, parameters, and performance of various tools and drills for making holes in ice sheets, ice caps, mountain glaciers, ice shelves, and sea ice. In recent years, interest in thermal drilling technology has increased as a result of subglacial lake explorations and extraterrestrial investigations. The book focuses on the latest ice drilling technologies, but also discusses the historical development of ice drilling tools and devices over the last 100 years to offer valuable insights into what is possible and what not to do in the future. Featuring numerous figures and pictures, many of them published for the first time, it is intended for specialists working in ice-core sciences, polar oceanography, drilling engineers and glaciologists, and is also a

useful reference for researchers and graduate students working in

engineering and cold-regions technology.