

1. Record Nr.	UNINA9910805664403321
Titolo	Development of high-temperature superconductor cables for high direct current applications
Pubbl/distr/stampa	Karlsruhe, : KIT Scientific Publishing, 2021
Descrizione fisica	1 online resource (194 p.)
Collana	Karlsruher Schriftenreihe zur Supraleitung
Soggetti	Electrical engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	A design process for HTS DC cables was developed for high current applications. Based on the design process, a 35 kA HTS DC cable demonstrator was developed. The superconducting elements of the demonstrator were manufactured and tested individually at 77 K. Afterwards, the demonstrator cable was assembled and tested at 77 K. The assembled demonstrator successfully reached 35 kA at 77 K and self field conditions.