1. Record Nr. UNINA9910674042803321 Autore Falco Pasquale De Titolo Challenges and New Trends in Power Electronic Devices Reliability Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 Descrizione fisica 1 electronic resource (207 p.) Soggetti Technology: general issues Energy industries & utilities Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The rapid increase in new power electronic devices and converters for Sommario/riassunto electric transportation and smart grid technologies requires a deepanalysis of their component performances, considering all of the different environmental scenarios, overload conditions, and high stressoperations. Therefore, evaluation of the reliability and availability of these devices becomes fundamental both from technical and economicalpoints of view. The rapid evolution of technologies and the high reliability level offered by these components have shown that estimating reliability through the traditional approaches is difficult, as historical failure data and/or past observed scenarios demonstrate. With the aim topropose new approaches for the evaluation of reliability, in this book, eleven innovative contributions are collected, all focusedon the reliability assessment of power electronic devices and

related components.