1. Record Nr. UNINA9910557706303321 Autore Naujoks Frederik Titolo Test and Evaluation Methods for Human-Machine Interfaces of **Automated Vehicles** Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 1 electronic resource (416 p.) Descrizione fisica Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto This book summarizes the latest developments in the area of human factors test and evaluation methods for automated vehicles. Future vehicles will allow a transition of responsibility from the driver to the automated driving system and vice versa. Drivers will have the opportunity to use a wide variety of different driver assistance systems within the same vehicle. This coexistence of different automation levels creates new challenges in the design of the vehicle's human-machine interface (HMI), which have to be accounted for by human factors experts, both in industrial design and in academia. This book brings together the latest developments, empirical evaluations and guidelines on various topics, such as the design and evaluation of interior as well as exterior HMIs for automated vehicles, and the assessment of the impact of automated vehicles on non-automated road users and driver

during automated driving.

state assessment (e.g., fatigue, motion sickness, fallback readiness)