

1. Record Nr.	UNINA9910438307003321
Titolo	Performance metrics for assessing driver distraction : the quest for improved road safety // edited by Gary L. Rupp
Pubbl/distr/stampa	Warrendale, Pa. (400 Commonwealth Dr., Wallendale PA USA) : , : Society of Automotive Engineers, , [2010], c2010 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2010]
Edizione	[1st ed.]
Descrizione fisica	1 PDF (264 pages) : illustrations, digital file
Collana	Society of Automotive Engineers. Electronic publications.
Altri autori (Persone)	RuppGary L
Soggetti	Motor vehicle driving - Safety measures Motor vehicle driving - Statistics Traffic accidents - Statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Driver Metrics, an Overview of User Needs and Uses / Peter C. Burns, Klaus Bengler, David H. Weir -- Driver Performance Metrics in Interface Design: Results of the 2nd International Driver Metrics Workshop / Daniel V. McGehee, Michael E. Rakauskas -- Conceptualizing Effects of Secondary Task Demands on Event Detection during Driving: Surrogate Methods and Issues / Linda S. Angell -- The Peripheral Detection Task (PDT): On-line Measurement of Driver Cognitive Workload and Selective Attention / A. Richard A. van der Horst and Marieke H. Martens -- The Tactile Detection Task as a Method for Assessing Drivers' Cognitive Load / Johan Engstrom -- Modified Sternberg Method for Assessing Event Detection While Driving / David R. Benedict, Linda S. Angell -- A Comparison of the Modified Sternberg Method, Peripheral Detection Tasks, and Other Surrogate Techniques / Lisa S. Angell -- Naturalistic Driving: Crash and Near Crash Surrogate Distraction Metrics / Miguel A. Perez, Linda S. Angell, and Jonathan M. Hankey -- Use of On-Road Data in Evaluating Driver Performance Metrics / Lucas Malta, Akira Ozaki, Chiyomi Miyajima, Norihide Kitaoka, and Kazuya Takeda -- Lane Keeping Performance Metrics for Assessment of Auditory-Cognitive Distraction / Pinar Boyraz, Amardeep Sathyanarayana, John H.L. Hansen, Erik Jonsson -- Measurement of Situation Awareness for

Automobile Technologies of the Future / Cheryl A. Bolstad, Haydee M. Cuevas, Jingjing Wang-Costello, and Mica R. Endsley -- Situation Awareness in Driving with In-Vehicle Information Systems / Barbara Metz, Nadja Schomig, Hans-Peter Krueger, Klaus Bengler -- Statistical Model for the Frequency of Backward Glancing as a Possible Measure of a Driver's Situation Awareness / Akihiko Takahashi and Motoyuki Akamatsu -- Lane Change Test: Preliminary Results of a Multi-Laboratory Calibration Study / Klaus Bengler, Stefan Mattes, Otmar Hamm -- 4th International Driver Metrics Workshop: Summary and Next Steps / Gary L. Rupp.

Sommario/riassunto

This book focuses on the study of secondary task demands imposed by in-vehicle devices on the driver while driving. It provides a mechanism for researchers to evaluate how in-vehicle devices such as navigation systems- as well as other devices such as cell phones - affect driver distraction and impact safety.

This book, which features the work presented by international experts at the 4th International Driver Metrics Workshop, in June 2008, offers a summary of the current state of driver metrics research.
