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Nota di contenuto	Part I- Smart Sensors, Connectivity & Intelligence -- Vehicle Localization using Infrastructure Sensing -- Alternative Technologies for V2I Communication -- Application of Artificial Intelligence Techniques for the Creation of Novel Services based on Connected Vehicles -- Part II - Safety, Security & Validation -- Validation and Verification Procedure for Automated Driving Functions using the Example of the TrustVehicle Project -- Advancing the Design of Fail-Operational Architectures, Communication Modules, Electronic Components, and Systems for Future Autonomous/Automated Vehicles -- Ongoing Cybersecurity and Safety Standardization Activities related to Highly Auto-mated/Autonomous Vehicles -- Enabling Trust for Advanced Semiconductor Solutions based on Physical Layout Verification -- Part III- Intelligent Mobility Systems -- CPS Road Network Scenarios analysed for Dependability and Standardization -- Design and Evaluation of Cooperative Automated Bus Lines -- Sustainable Shared Mobility interconnected with Public Transport in European Rural Areas -- Autonomous Vehicle Shuttle in Smart City Testbed -- Part IV- Human Factors -- How are Eye Tracking Patterns in Takeover Situations related to Complexity, Takeover Quality and Cognitive Model Predictions? -- Automatic Detection and Prediction of

	the Transition between the Behavioural States of a Subject through a Wearable CPS.
Sommario/riassunto	This book gathers papers from the 23rd International Forum on Advanced Microsystems for Automotive Applications (AMAA 2020) held online from Berlin, Germany, on May 26-27, 2020. Focusing on intelligent system solutions for auto mobility and beyond, it discusses in detail innovations and technologies enabling electrification, automation and diversification, as well as strategies for a better integration of vehicles into the networks of traffic, data and power. Further, the book addresses other relevant topics, including the role of human factors and safety issues in automated driving, solutions for shared mobility, as well as automated bus transport in rural areas. Implications of current circumstances, such as those generated by climate change, on the future development of auto mobility, are also analysed, providing researchers, practitioners and policy makers with an authoritative snapshot of the state-of-the-art, and a source of inspiration for future developments and collaborations.