1. Record Nr. UNINA9910484938603321

Autore	Guerrieri Marco
Titolo	A Concise Introduction to Traffic Engineering : Theoretical Fundamentals and Case Studies / / by Marco Guerrieri, Raffaele Mauro
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-60723-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XVI, 196 p. 90 illus.)
Collana	Springer Tracts in Civil Engineering, , 2366-2603
Disciplina	388.31 388.312
Soggetti	Transportation engineering Traffic engineering Industrial Management Operations research Management science Transportation Technology and Traffic Engineering Operations Research, Management Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Macroscopic variables and fundamental relationships of traffic flow theory -- Macroscopic traffic flow models -- Continuity flow equation, kinematic waves and shock waves -- Microscopic models and traffic instability -- Fundamentals of random and traffic processes -- Traffic management and control systems -- Interference between traffic flows: the gap acceptance theory -- Queue formation: general models -- Unsignalized intersections.
Sommario/riassunto	This book covers a selection of fundamental topics of traffic engineering useful for highways facilities design and control. The treatment is concise but it does not neglect to examine the most recent and crucial theoretical aspects which are at the root of numerous highway engineering applications, like, for instance, the essential aspects of highways traffic stream reliability calculation and automated highway systems control. In order to make these topics easy to follow, several illustrative worked examples of applications are provided in

great detail. An intuitive and discursive, rather than formal, style has been adopted throughout the contents. As such, the book offers up-to-date and practical knowledge on several aspects of traffic engineering, which is of interest to a wide audience including students, researchers as well as transportation planners, public transport specialists, city planners and decision-makers.