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Titolo	Safe trajectory planning for maritime surface ships // Agnieszka Lazarowska
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	9783030977153 9783030977146
Descrizione fisica	1 online resource (192 pages) : illustrations (some color)
Collana	Springer series on naval architecture, marine engineering, shipbuilding and shipping ; v.13
Disciplina	623.8884
Soggetti	Rule of the road at sea
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction Problem definition Methodology for safe trajectory planning Deterministic algorithms Non-deterministic algorithms Registration of navigational data Evaluation of algorithms
Sommario/riassunto	This book offers a comprehensive review of collision avoidance techniques and safe trajectory planning for manned and unmanned ships, together with extensive information on how to develop and implement algorithms for applications in real-world settings. It describes the most relevant decision-support systems and guidance systems used in the control of marine craft, giving a special emphasis to autonomous vehicles, but also covering manned ones. Thanks to its good balance of theory and practice, and the inclusion of basic explanations of all essential concepts, this book fills an important gap in the literature of marine navigation, providing not only researchers and practitioners with a timely reference guide to safe trajectory planning, but also supporting students and newcomers to the field.