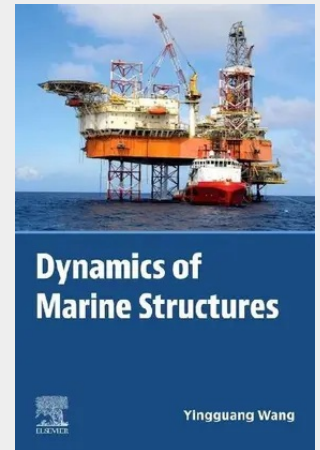


Dynamics of Marine Structures

Dynamics of Marine Structures begins by outlining foundational concepts of stochastic wave theory to facilitate cardinal understanding of nonlinear dynamical systems in the marine environment that respond to complex interactions with a wide range of factors. The book then illustrates, in detail, up-to-date statistical methods and hydro-elastic numerical modeling techniques to accurately predict extreme responses and operating limits of marine structures. Next, users will find comprehensive practical guidance on how to undertake marine structural design work for a variety of structures, including ships, sea walls, vertical breakwaters, harbors, and offshore energy facilities. Finally, the volume also reviews existing literature and summarizes the latest applied research investigations for students, researchers, and professional engineers alike, thus paving the way for further advancements in next-generation marine construction in support of global sustainable development targets.

The ability to estimate and characterize ocean and sea structures' dynamic behavior under wave-excitation forces is an underlying element of contemporary, optimized marine engineering design. Taking an interdisciplinary approach, Dynamics of Marine Structures begins by outlining foundational concepts of stochastic wave theory to facilitate cardinal understanding of nonlinear dynamical systems in the marine environment that respond to complex interactions with a wide range of factors. It goes on to illustrate in detail up-to-date statistical methods and hydro-elastic numerical modeling techniques to accurately predict extreme responses and operating limits of marine structures, and it then concludes with comprehensive practical guidance for readers undertaking marine structural design work for a variety of structures, including ships, sea walls, vertical breakwaters, harbors, and offshore energy facilities.

The volume also reviews literature and summarizes the latest applied research investigations for students, researchers, and professional engineers alike, paving the way for further advancements in next-generation marine construction in support of global sustainable development targets.



244,50 €

244,50 € (zzgl. MwSt.)

*vorbestellbar, Erscheinungstermin ca.
Juli 2026*

Artikelnummer: 9780443298592

Medium: Buch

ISBN: 978-0-443-29859-2

Verlag: Elsevier Science

Erscheinungstermin: 30.07.2026

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2026

Produktform: Kartoniert

Gewicht: 450 g

Seiten: 560

Format (B x H): 152 x 229 mm

