Record Nr. UNINA9910583398903321

Autore Bjørnø Leif

Titolo Applied underwater acoustics / / Leif Bjorno ; edited by Thomas H.

Neighbors III, David Bradley

Pubbl/distr/stampa Amsterdam, Netherlands:,: Elsevier,, 2017

©2017

ISBN 0-12-811247-6

0-12-811240-9

Descrizione fisica 1 online resource (982 pages): illustrations

Disciplina 620.25

Soggetti Underwater acoustics

Waves

Ambient sounds

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references at the end of each chapters and

index.

Sommario/riassunto Applied Underwater Acoustics meets the needs of scientists and

engineers working in underwater acoustics and graduate students solving problems in, and preparing theses on, topics in underwater acoustics. The book is structured to provide the basis for rapidly assimilating the essential underwater acoustic knowledge base for practical application to daily research and analysis. Each chapter of the book is self-supporting and focuses on a single topic and its relation to underwater acoustics. The chapters start with a brief description of the topic's physical background, necessary definitions, and a short description of the applications, along with a roadmap to the chapter. The subtopics covered within individual subchapters include most frequently used equations that describe the topic. Equations are not derived, rather, assumptions behind equations and limitations on the applications of each equation are emphasized. Figures, tables, and illustrations related to the sub-topic are presented in an easy-to-use manner, and examples on the use of the equations, including

appropriate figures and tables are also included. Provides a complete

and up-to-date treatment of all major subjects of underwater acoustics Presents chapters written by recognized experts in their individual field Covers the fundamental knowledge scientists and engineers need to solve problems in underwater acoustics Illuminates, in shorter subchapters, the modern applications of underwater acoustics that are described in worked examples Demands no prior knowledge of underwater acoustics, and the physical principles and mathematics are designed to be readily understood by scientists, engineers, and graduate students of underwater acoustics Includes a comprehensive list of literature references for each chapter.