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| Autore                  | Hodges Richard P   |
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| Descrizione fisica      | 1 online resource (373 p.)   |
| Disciplina              | 620.25<br>621.389/5  |
| Soggetti                | Underwater acoustics<br>Sonar - Mathematical models<br>Elastic wave propagation  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | UNDERWATER ACOUSTICS; Contents; About the Author; Preface; Acknowledgements; 1 Introduction to Sonar; 2 The Sonar Equations; 3 Transducers, Directionality, and Arrays; 4 Active Sonar Sources; 5 Transmission Loss; 6 Transmission Loss: Interaction with Boundaries; 7 Ambient Noise; 8 Reverberation; 9 Active Target Strength; 10 Radiated Noise; 11 Self Noise; 12 Statistical Detection Theory; 13 Methodology for Calculation of the Recognition Differential; 14 False Alarms, False Contacts, and False Targets; 15 Variability and Uncertainty; 16 Modeling Detection and Tactical Decision Aids<br>17 Cumulative Probability of Detection<br>18 Tracking, Target Motion Analysis, and Localization; 19 Design and Evaluation of Sonars; A Fourier Transforms; B Analysis of Errors Associated with a Least Squares Methodology; Index |
| Sommario/riassunto      | Offering complete and comprehensive coverage of modern sonar   |

spectrum system analysis, Underwater Acoustics: Analysis, Design and Performance of Sonar provides a state-of-the-art introduction to the subject and has been carefully structured to offer a much-needed update to the classic text by Urick. Expanded to include computational approaches to the topic, this book treads the line between the highly theoretical and mathematical texts and the more populist, non-mathematical books that characterize the existing literature in the field. The author compares and contrasts different techni

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