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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 17 Cumulative Probability of Detection 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
