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Nota di contenuto	List of Examples -- Preface -- Acknowledgements -- 7 Radiation from Vibrating Bodies -- 8 Radiation from a Source in a Baffle -- 9 Modal Analysis of Waveguides -- 10 Modal Analysis of Enclosures -- 11 Geometrical Acoustics -- 12 Scattering -- 13 Nonlinear Acoustic Waves -- Appendix A: Curvilinear Coordinates -- Appendix B: Fourier Transforms -- Index.
Sommario/riassunto	This textbook provides graduate and advanced undergraduate students with a comprehensive introduction to the application of basic principles and concepts for physical and engineering acoustics. Many of the chapters are independent, and all build from introductory to more sophisticated material. Written by a well-known textbook author with 39 years of experience performing research, teaching, and mentoring in the field, it is specially designed to provide maximum support for

learning. Derivations are rigorous and logical, with thorough explanations of operations that are not obvious. Many of the derivations and examples have not previously appeared in print. Important concepts are discussed for their physical implications and implementation. Many of the 56 examples are mini case studies that address systems students will find to be interesting and motivating for continued study. The example solutions address both the significance of the example and the reasoning underlying the formulation. Tasks that require computational work are fully explained. This volume contains 168 homework exercises, accompanied by a detailed solutions manual for instructors. Building on the foundation provided in Volume I: Fundamentals, this text offers a knowledge base that will enable the reader to begin undertaking research and to work in the core areas of acoustics. Provides broad and comprehensive treatment of the application of basic principles and techniques encountered in physical and engineering acoustics Contains 56 innovative examples, many of which are based on real-world research, highlighting the connection between physical phenomena and derived principles Features logical and rigorous presentation of derivations and examples, without sacrificing lucidity and explanation of operations that might be unfamiliar to the student Embeds coverage of numerical methods into the examples, including discussion of algorithms and associated macrocode, with Matlab code available online.

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