

1. Record Nr.	UNINA9910254606703321
Autore	Nilsson Anders
Titolo	Vibro-Acoustics, Volume 3 [[electronic resource] /] / by Anders Nilsson, Bilong Liu
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016
ISBN	3-662-47937-0
Edizione	[2nd ed. 2016.]
Descrizione fisica	1 online resource (XIII, 275 p. 55 illus., 1 illus. in color.)
Disciplina	620.2
Soggetti	Sound Energy systems Noise control Vibration Dynamical systems Dynamics Mechanics Mechanics, Applied Acoustics Energy Systems Noise Control Vibration, Dynamical Systems, Control Solid Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Problems -- Solutions -- Summary of Result.
Sommario/riassunto	This three-volume book gives a thorough and comprehensive presentation of vibration and acoustic theories. Different from traditional textbooks which typically deal with some aspects of either acoustic or vibration problems, it is unique of this book to combine those two correlated subjects together. Moreover, it provides fundamental analysis and mathematical descriptions for several crucial phenomena of Vibro-Acoustics which are quite useful in noise reduction, including how structures are excited, energy flows from an

excitation point to a sound radiating surface, and finally how a structure radiates noise to a surrounding fluid. Many measurement results included in the text make the reading interesting and informative. Problems/questions are listed at the end of each chapter and the solutions are provided. This will help the readers to understand the topics of Vibro-Acoustics more deeply. The book should be of interest to anyone interested in sound and vibration, vehicle acoustics, ship acoustics and interior aircraft noise. This is the third volume, and presents 201 problems and their solutions plus a summary of the main results from volumes 1 and 2.
