1. Record Nr. UNINA9910299577603321

Autore	Wijker Jaap
Titolo	Miles' Equation in Random Vibrations : Theory and Applications in Spacecraft Structures Design / / by Jaap Wijker
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-73114-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIX, 219 p. 117 illus., 53 illus. in color.)
Collana	Solid Mechanics and Its Applications, , 0925-0042 ; ; 248
Disciplina	629.471
Soggetti	Aerospace engineering Astronautics Vibration Dynamics Mechanics Aerospace Technology and Astronautics Vibration, Dynamical Systems, Control Classical Mechanics
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	This book discusses the theory, applicability and numerous examples of Miles’ equation in detail. Random vibration is one of the main design drivers in the context of the design, development and verification of spacecraft structures, instruments, equipment, etc, and Miles’ equation provides a valuable tool for solving random vibration problems. It allows mechanical engineers to make rapid preliminary random response predictions when the (complex) structure is exposed to mechanical and acoustical loads. The book includes appendices to support the theory and applications in the main chapters.