1.	Record Nr.	UNINA9910817613703321
	Autore	Wang C. Y (Chang Yi), <1939->
	Titolo	Structural vibration : exact solutions for strings, membranes, beams, and plates / / C.Y. Wang and C.M. Wang
	Pubbl/distr/stampa	Boca Raton, Fla., : Taylor & Francis/CRC Press, 2014
	ISBN	0-429-10198-8 1-62870-747-X 1-4665-7684-7
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (307 p.)
	Classificazione	TEC009070TEC063000
	Altri autori (Persone)	WangC. M
	Disciplina	624.1/76
	Soggetti	Structural dynamics Plates (Engineering) - Vibration Girders - Vibration
	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.
	Nota di contenuto	Front Cover; Contents; Preface; About the Authors; Chapter 1 - Introduction to Structural Vibration; Chapter 2 - Vibration of Strings; Chapter 3 - Vibration of Membranes; Chapter 4 - Vibration of Beams; Chapter 5 - Vibration of Isotropic Plates; Chapter 6 - Vibration of Plates with Complicating Effects; Chapter 7 - Vibration of Nonisotropic Plates; Back Cover
	Sommario/riassunto	"Structural Vibration: Exact Solutions for Strings, Membranes, Beams, and Plates offers an introduction to structural vibration and highlights the importance of the natural frequencies in design. It focuses on free vibrations for analysis and design of structures and machine and presents the exact vibration solutions for strings, membranes, beams, and plates. This book emphasizes the exact solutions for free transverse vibration of strings, membranes, beams, and plates. It explains the intrinsic, fundamental, and unexpected features of the solutions in terms of known functions as well as solutions determined from exact characteristic equations. The book provides:A single-volume resource for exact solutions of vibration problems in strings, membranes, beams, and plates A reference for checking vibration frequency values and mode shapes of structural problemsGoverning

equations and boundary conditions for vibration of structural elements Analogies of vibration problems Structural Vibration: Exact Solutions for Strings, Membranes, Beams, and Plates provides practicing engineers, academics, and researchers with a reference for data on a specific structural member as well as a benchmark standard for numerical or approximate analytical methods"--