1. Record Nr. UNINA9910858901203321

Autore	Istituto Giuseppe Toniolo di studi superiori <Milano>
Titolo	La condizione giovanile in Italia : rapporto giovani 2024 / Istituto Giuseppe Toniolo
Pubbl/distr/stampa	Bologna, : il Mulino, 2024
ISBN	9788815388919
Descrizione fisica	217 p. ; 24 cm
Collana	Percorsi
Disciplina	305.242
Locazione	bfs
Collocazione	305.242 IGT 11
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910484602703321

Autore	Zhong Zheng
Titolo	Analytical or Semi-analytical Solutions of Functionally Graded Material Structures / / by Zheng Zhong, Guojun Nie
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-2004-0
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (292 pages)
Collana	Engineering Series
Disciplina	620.118
Soggetti	Mechanics, Applied Building materials Mechanics Engineering Mechanics Structural Materials Classical Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Introduction -- Fundamentals for an Elastic FGM Body -- Governing Equations for Different Solution Schemes -- Functionally Graded Beams -- Rectangular Functionally Graded Plates 122 -- Circular Functionally Graded Plates 200 -- Hollow Functionally Graded Cylinders 231 -- Hollow Functionally Graded Spheres 275.
Sommario/riassunto	This book provides a comprehensive introduction to the analysis of functionally graded materials and structures. Functionally graded materials (FGMs), in which the volume fractions of two or more constituent materials are designed to vary continuously as a function of position along certain direction(s), have been developed and studied over the past three decades. The major advantage of FGMs is that no distinct internal boundaries exist, and failures from interfacial stress concentrations developed in conventional components can be avoided. The gradual change of material properties can be tailored to different applications and working environments. As these materials' range of application expands, new methodologies have to be developed to characterize them, and to design and analyze structural components made of them. Despite a number of existing papers on the analysis of

functionally graded materials and structures, there is no single book that is devoted entirely to the analysis of functionally graded beams, plates and shells using different methods, e.g.,analytical or semi-analytical methods. Filling this gap in the literature, the book offers a valuable reference resource for senior undergraduates, graduate students, researchers, and engineers in this field. The results presented here can be used as a benchmark for checking the validity and accuracy of other numerical solutions. They can also be used directly in the design of functionally graded materials and structures. .