

1.	Record Nr.	UNISA990000246700203316
	Autore	Patterson, David A.
	Titolo	Computer architecture a quantitative approach / David A. Patterson, John L. Hennessy ; with a contribution by David Goldberg
	Pubbl/distr/stampa	San Mateo (Calif.) : Morgan Kaufmann Publishers, copyr. 1990
	ISBN	1-55860-188-0
	Descrizione fisica	XXVIII, 594, [200] p. : ill. ; 24 cm
	Disciplina	00422
	Collocazione	004.22 PAT
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910959411403321
	Titolo	Acoustic interactions with submerged elastic structures . Part II Propagation, ocean acoustics and scattering / / [edited by] Ardeshir Guran ... [et. al.]
	Pubbl/distr/stampa	Singapore ; ; River Edge, NJ, : World Scientific, 2001
	ISBN	9786611960841 9781281960849 1281960845 9789812811950 9812811958
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (389 p.)
	Collana	Series on stability, vibration, and control of systems. Series B ; ; v. 5
	Altri autori (Persone)	GuranA (Ardeshir) UberallHerbert <1931->
	Disciplina	534.2
	Soggetti	Underwater acoustics Elastic analysis (Engineering)
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Note generali

"... volume is intended to honor contributions of Professor Herbert Uberall to acoustics and wave propagation."--Pref.

"With a foreword by Hans A. Bethe."

"A Herbert Uberall Festschrift Volume."

Nota di bibliografia

Includes bibliographical references and indexes.

Nota di contenuto

Foreword; Preface; Contributors; Contents; Chapter 1: Discrete Spectral Analysis for Solitary Waves; 1. Introduction; 2. Pseudospectral Method; 3. Formation of Solitons in the KdV Systems; 4. Other Solitonic Systems; 5. Closing Remarks; 6. Acknowledgements; 7. References; Chapter 2: Propagation and Interaction of Waves in Nonlinear-Elastic Solids with Microstructures; 1. Introduction; 2. Basic Approaches to the Construction of Mathematical Models of Elastic Media with Inner Structure; 3. Structural-Phenomenological Models; 4. Dispersion Equations; 5. Evaluation of Material Constants
6. Nonlinear Plane Stationary Waves
7. Nonlinear Wave Beams; 8. Resonant Interaction of Elastic Waves in Nonlinearly-Elastic Solid with Microstructure; 9. Research Plans; 10. References; Chapter 3: Matched Field Processing: A Powerful Tool for the Study of Oceans and Scatterers; 1. Introduction; 2. Deep Ocean Tomography; 3. The Determination of Shallow Water Bottom Properties; 4. Targets; 5. Conclusions; 6. Acknowledgements; 7. References; Chapter 4: Progress in Underwater Acoustic Modeling; 1. Introduction; 2. Model Categories; 3. Applications; 4. Future Directions; 5. References
Chapter 5: Reflectivity Response of a Submerged Layer with Density Sound Velocity and Absorption Gradients
1. Introduction; 2. The Gradient Medium; 3. Acoustic Field in an Inhomogeneous Medium; 4. Reflection by an Inhomogeneous Layer Submerged in Water; 5. Conclusions; 6. References; Chapter 6: Mathematical Aspects of Wave Phenomena in a Wave Guide with Elastic Walls and Operator Polynomials; 1. Introduction; 2. The Mathematical Background; 3. The Physical Model under Consideration. Wave Numbers; 4. Modes; 5. The Energy Fluxes; 6. The Non-Homogeneous Problem: Preliminary Consideration
7. The Non-Homogeneous Problem in the Cross-Section. Definition of the Generalized Solution
8. The Generalized Eigenfunctions of the Problem in the Cross-Section; 9. The Non-Homogeneous Problem in the Cross-Section; 10. The Abstract Differential Equation Formulation for the Non-Homogeneous Problem; 11. Fourier Method for the Wave Guide with Elastic Walls; 12. Critical Frequencies; 13. Conclusions; 14. References; Chapter 7: On Some General Mathematical Properties of the System Elastic Plate - Acoustic Medium; 1. BVCP in an Arbitrary Plane Domain
2. Boundary Value Contact Problem in an Infinite Domain
3. On the Uniqueness of a Solution of BVCP; 4. Optical Theorem for Acoustic Scattering; 5. Conclusion; 6. Acknowledgment; 7. References; Chapter 8: Acoustic Scattering from Finite Length Cylinders Encapped by Two Hemispheres; 1. Introduction; 2. Study of the Cylindrical Objects; 3. Study of the Spherical Objects; 4. Study of Objects Consisting of a Cylindrical Part Bounded by Two Hemispherical Endcaps; 5. Conclusion; 6. Acknowledgements; 7. References
Chapter 9: Acoustic Scattering from a Circular Cylindrical Shell Immersed in Water. Generation and Reradiation of Guided Waves

Sommario/riassunto

The interaction of acoustic fields with submerged elastic structures, both by propagation and scattering, is being investigated at various institutions and laboratories world-wide with ever-increasing sophistication of experiments and analysis. This book offers a collection of contributions from these research centers that represent

the present state-of-the-art in the study of acoustic elastic interaction, being on the cutting edge of these investigations. This includes the description of acoustic scattering from submerged elastic objects and shells by the Resonance Scattering Theory of Flax,
