

1. Record Nr.	UNISA990001917700203316
Titolo	La semiotique formelle : approche linguistico-mathematique / sous la direction du professeur Solomon ; par Tudor Balanescu ... [et al.] ; [trad. di Helene Combes]
Pubbl/distr/stampa	Paris : Editions Klincksieck Bucarest : Editura Academiei, 1978
Descrizione fisica	309 p. ; 23 cm
Collana	Semiosis ; 4
Disciplina	398
Soggetti	Folklore - Teorie Folklore - Romania
Collocazione	IV.2. 210(Varie Coll 779/4)
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910299709403321
Autore	Le Khanh Chau
Titolo	Energy Methods in Dynamics // by Khanh Chau Le, Lu Trong Khiem Nguyen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-05419-8
Edizione	[2nd ed. 2014.]
Descrizione fisica	1 online resource (419 p.)
Collana	Interaction of Mechanics and Mathematics, , 1860-6245
Disciplina	003.85
Soggetti	Vibration Dynamics System theory Energy Vibration, Dynamical Systems, Control Systems Theory, Control Energy, general
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 and index.
Nota di contenuto	Preface to the Second Edition; Preface to the First Edition; Contents; Part I; Single Oscillator; 1.1 Harmonic Oscillator; 1.2 Damped Oscillator; 1.3 Forced Oscillator; 1.4 Harmonic Excitations and Resonance; 1.5 Exercises; Coupled Oscillators; 2.1 Conservative Oscillators; 2.2 Dissipative Oscillators; 2.3 Forced Oscillators and Vibration Control; 2.4 Variational Principles; 2.5 Oscillators with; 2.6 Exercises; Continuous Oscillators; 3.1 Chain of Oscillators; 3.2 String; 3.3 Beam; 3.4 Membrane; 3.5 Plate; 3.6 General Continuous Oscillators; 3.7 Exercises; LinearWaves; 4.1 HyperbolicWaves 4.2 DispersiveWaves4.3 ElasticWaveguide; 4.4 Energy Method; 4.5 Exercises; Part II; Autonomous Single Oscillator; 5.1 Conservative Oscillator; 5.2 Dissipative Oscillator; 5.3 Self-excited Oscillator; 5.4 Oscillator withWeak or Strong Dissipation; 5.5 Exercises; Non-autonomous Single Oscillator; 6.1 Parametrically-Excited Oscillator; 6.2 Mathieu's Differential Equation; 6.3 Duffing's Forced Oscillator; 6.4 Forced Vibration of Self-excited Oscillator; 6.5 Exercises; Coupled

Oscillators; 7.1 Conservative Oscillators; 7.2 Bifurcation of Nonlinear Normal Modes; 7.3 KAM Theory
7.4 Coupled Self-excited Oscillators 7.5 Exercises; Nonlinear Waves; 8.1 Solitary and Periodic Waves; 8.2 Inverse Scattering Transform; 8.3 Energy Method; 8.4 Amplitude and Slope Modulation; 8.5 Amplitude Modulations for KdV Equation; 8.6 Exercises; Notation; References; Index

Sommario/riassunto

Energy Methods in Dynamics is a textbook based on the lectures given by the first author at Ruhr University Bochum, Germany. Its aim is to help students acquire both a good grasp of the first principles from which the governing equations can be derived, and the adequate mathematical methods for their solving. Its distinctive features, as seen from the title, lie in the systematic and intensive use of Hamilton's variational principle and its generalizations for deriving the governing equations of conservative and dissipative mechanical systems, and also in providing the direct variational-asymptotic analysis, whenever available, of the energy and dissipation for the solution of these equations. It demonstrates that many well-known methods in dynamics like those of Lindstedt-Poincare, Bogoliubov-Mitropolsky, Kolmogorov-Arnold-Moser (KAM), Wentzel-Kramers-Brillouin (WKB), and Whitham are derivable from this variational-asymptotic analysis. This second edition includes the solutions to all exercises as well as some new materials concerning amplitude and slope modulations of nonlinear dispersive waves.
