1.	Record Nr.	UNINA9910257390203321
	Titolo	Integrability of Nonlinear Systems [[electronic resource] /] / edited by Yvette Kosmann-Schwarzbach, Basil Grammaticos, K.M. Tamizhmani
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2004
	ISBN	3-540-40962-9
	Edizione	[1st ed. 2004.]
	Descrizione fisica	1 online resource (XII, 340 p.)
	Collana	Lecture Notes in Physics, , 0075-8450 ; ; 638
	Disciplina	530.15/18
	Soggetti	Physics Differential equations Partial differential equations Statistical physics Dynamical systems Mathematical Methods in Physics Ordinary Differential Equations Partial Differential Equations Complex Systems Statistical Physics and Dynamical Systems
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di contenuto	Nonlinear Waves, Solitons, and IST (M.J. Ablowitz) -- Integrability - - and How to Detect it (B. Grammaticos, A. Ramani) -- Introduction to the Hirota Bilinear Method (J. Hietarinta) -- Lie Bialgebras, Poisson Lie Groups, and Dressing Transformations (Y. Kosmann-Schwarzbach) -- Analytic and Asymptotic Methods for Nonlinear Singularity Analysis: A Review and Extensions of Tests for the Painlevé Property (M.D. Kruskal, N. Joshi, R. Halburd) -- Eight Lectures on Integrable Systems (F. Magri, P. Casati, G. Falqui, M. Pedroni) -- Bilinear Formalism in Soliton Theory (J. Satsuma) -- Quantum and Classical Integrable Systems (M.A. Semenov-Tian-Shansky).
	Sommario/riassunto	The lectures that comprise this volume constitute a comprehensive survey of the many and various aspects of integrable dynamical systems. The present edition is a streamlined, revised and updated

version of a 1997 set of notes that was published as Lecture Notes in Physics, Volume 495. This volume will be complemented by a companion book dedicated to discrete integrable systems. Both volumes address primarily graduate students and nonspecialist researchers but will also benefit lecturers looking for suitable material for advanced courses and researchers interested in specific topics.