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	Titolo	Off-Diagonal Bethe Ansatz for Exactly Solvable Models [[electronic resource] /] / by Yupeng Wang, Wen-Li Yang, Junpeng Cao, Kangjie Shi
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	Soggetti	Physics Condensed matter Quantum field theory String theory Mathematical physics Mathematical Methods in Physics Condensed Matter Physics Quantum Field Theories, String Theory Mathematical Physics
	Lingua di pubblicazione	Inglese
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	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Overview -- The algebraic Bethe ansatz -- The periodic anisotropic spin-1/2 chains -- The spin-1/2 torus -- The spin-1/2 chain with arbitrary boundary fields -- The one-dimensional Hubbard model -- The nested off-diagonal Bethe ansatz -- The hierarchical off-diagonal Bethe Ansatz -- The Izergin-Korepin model.
	Sommario/riassunto	This book serves as an introduction of the off-diagonal Bethe Ansatz method, an analytic theory for the eigenvalue problem of quantum integrable models. It also presents some fundamental knowledge about quantum integrability and the algebraic Bethe Ansatz method. Based on the intrinsic properties of R-matrix and K-matrices, the book

introduces a systematic method to construct operator identities of transfer matrix. These identities allow one to establish the inhomogeneous T-Q relation formalism to obtain Bethe Ansatz equations and to retrieve corresponding eigenstates. Several longstanding models can thus be solved via this method since the lack of obvious reference states is made up. Both the exact results and the off-diagonal Bethe Ansatz method itself may have important applications in the fields of quantum field theory, low-dimensional condensed matter physics, statistical physics and cold atom systems.