1.

Record Nr.	UNINA9910783722303321
Titolo	Frustrated spin systems [[electronic resource] /] / editor, H.T. Diep
Pubbl/distr/stampa	Hackensack, NJ, : World Scientific, c2004
ISBN	1-281-88085-X 9786611880859 981-256-781-X
Descrizione fisica	1 online resource (625 p.)
Altri autori (Persone)	DiepH. T
Disciplina	538/.3
Soggetti	Magnetization Rotational motion Spin waves Ferromagnetism
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	1st ed. published in 1994 as Magnetic systems with competing interactions.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	PREFACE; CONTENTS; CHAPTER 1 FRUSTRATION - EXACTLY SOLVED FRUSTRATED MODELS; CHAPTER 2 PROPERTIES AND PHASE TRANSITIONS IN FRUSTRATED ISING SYSTEMS; CHAPTER 3 RENORMALIZATION GROUP APPROACHES TO FRUSTRATED MAGNETS IN D=3; CHAPTER 4 PHASE TRANSITIONS IN FRUSTRATED VECTOR SPIN SYSTEMS: NUMERICAL STUDIES; CHAPTER 5 TWO-DIMENSIONAL QUANTUM ANTIFERROMAGNETS; CHAPTER 6 ONE-DIMENSIONAL SPIN LIQUIDS; CHAPTER 7 SPIN ICE; CHAPTER 8 EXPERIMENTAL STUDIES OF FRUSTRATED PYROCHLORE ANTIFERROMAGNETS; CHAPTER 9 RECENT PROGRESS IN SPIN GLASSES; INDEX
Sommario/riassunto	Frustrated spin systems have been first investigated five decades ago. Well-known examples include the Ising model on the antiferromagnetic triangular lattice studied by G H Wannier in 1950 and the Heisenberg helical structure discovered independently by A Yoshimori, J Villain and T A Kaplan in 1959. However, many properties of frustrated systems are still not well understood at present. Recent studies reveal that established theories, numerical simulations as well as experimental techniques have encountered many difficulties in dealing with