•	Record Nr.	UNINA9910820824203321
	Titolo	Frustrated spin systems / / editor, H.T. Diep
	Pubbl/distr/stampa	Hackensack, NJ, : World Scientific, c2004
	ISBN	1-281-88085-X
		9786611880859 981-256-781-X
	Edizione	[1st ed.]
	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

1.