Spin-Fermion Models For Magnetic Semiconductors and High-Tc Cuprates

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LAP Lambert Academic Publishing Aug 2013, 2013. Taschenbuch. Book Condition: Neu. 220x150x8 mm. This item is printed on demand - Print on Demand Neuware - In this book unbiased numerical techniques are applied to the study of two of the most important current problems in condensed matter physics: magnetically doped III-V semiconductors and high-temperature superconductors. The first part of the book mainly focus on the first full-scale study of a realistic model for the III-V Mn-doped semiconductors using state-of-the-art numerical techniques. More specifically, a real-space Hamiltonian with the fcc lattice structure that reproduces the valence bands of undoped GaAs are constructed. In addition, two-band model and a new phenomenological eight-band model that takes into account the Mn d-levels are also developed. In the second part of the book, the effects of adiabatic phonons on a spin-fermion model for high Tc cuprates are studied using Monte Carlo simulations. 132 pp. Englisch.

Reviews

The ebook is straightforward in read easier to recognize. It is actually writter in basic phrases and not difficult to understand. You can expect to like just how the author compose this book.

-- ***Camilla Kub***

This pdf is really gripping and fascinating. It is actually full of knowledge and wisdom I am just delighted to tell you that this is the very best pdf i have got study during my very own daily life and might be he finest pdf for actually.

-- ***Ms. Althea Kassulke DDS***