



TRANSITION METAL COMPOUNDS

Describing all aspects of the physics of transition metal compounds, this book provides a comprehensive overview of this unique and diverse class of solids.

Beginning with the basic concepts of the physics of strongly correlated electron systems, the structure of transition metal ions, and the behavior of transition metal ions in crystals, it goes on to cover more advanced topics such as metal–insulator transitions, orbital ordering, and novel phenomena such as multiferroics, systems with oxygen holes, and high- T_c superconductivity.

Each chapter concludes with a summary of key facts and concepts, presenting all the most important information in a consistent and concise manner. Set within a modern conceptual framework, and providing a complete treatment of the fundamental factors and mechanisms that determine the properties of transition metal compounds, this is an invaluable resource for graduate students, researchers, and industrial practitioners in solid-state physics and chemistry, materials science, and inorganic chemistry.

Daniel I. Khomskii is a Professor at the University of Köln, Germany, where his research interests focus on metal–insulator transitions, magnetism, orbital ordering, and superconductivity.

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