

Preface

This book gives an up to date survey of acoustic effects in the Solid State. After a review of the different experimental techniques and an introduction to the theory of elasticity, emphasizing the symmetry aspects, applications are given for the different fields of condensed matter physics. These applications include metals and semiconductors, superconductivity, unstable magnetic moments including heavy fermion physics, magnetism, structural and magnetic phase transitions, low dimensional systems, amorphous systems and symmetry related experiments. The main emphasis is on more recent developments not covered in books written 30 years ago. Actually, acoustic experiments have been performed in all modern fields of solid state physics.

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Bruno Lüthi



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Lüthi, B.

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