Preface

This book indicates the X-ray scattering methods available to analyse a large range of materials. The emphasis is on the evaluation of the structural properties that influence the physical properties and should be of interest to those who wish to understand more about their material. Semiconductors range in quality from the most perfect crystals to amorphous materials, all of which can be analysed by X-ray scattering, so the methods are common for a large range of other materials.

This book covers the basic structural characteristics of materials, the theory of X-ray scattering for analysing material properties, the principles of the instrumentation, including recent developments, and numerous examples of analyses. Considerable sections of the theoretical development, principles of the instrumentation and examples have not been previously published.

This second edition differs from the first in including a comprehensive subject index, corrections to some of the equations (although most were rather obvious) and changes to some of the figures. This is now closer to my original intentions.

X-RAY SCATTERING FROM SEMICONDUCTORS
© Imperial College Press
http://www.worldscibooks.com/physics/p137.html