

<<光电子光谱学>>

图书基本信息

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前言

Since the completion of the manuscript for the first edition of Photoelectron Spectroscopy, the field has undergone a steady growth. Firstly, the theory has been refined and condensed into a manageable form. Secondly two important experimental developments have occurred. The resolution that can be obtained is now of the order of 3 meV, which corresponds approximately to an energy of 30 kK. This means that photoelectron spectroscopy can now obtain data with an accuracy similar to that achieved in standard thermodynamic experiments (such as specific heat experiments), thus facilitating a direct comparison of data from the two different types of experiment. The second important experimental advance is that one can now readily measure electron energy distributions over a solid angle of almost 4π . This yields valuable information whenever these electron energy distributions have anisotropies. It was decided, in view of these developments, to rework and expand the volume so as to do justice to the full potential of today's photoelectron spectroscopy. I have benefitted very much from the help of my group namely R. de Masi, D. Ehm, B. Eltner, F. Miiller, G. Nicolay, F. Reinert, D. Reinicke and in particular S. Schmidt. Without the dedicated effort of these collaborators the present edition could not have been produced. I am grateful to S. Neumann who typed the complete text with great skill. Thanks are due to the Springer Verlag for their expert help and patience.

内容概要

Since the completion of the manuscript for the first edition of Photoelectron Spectroscopy, the field has undergone a steady growth. Firstly, the theory has been refined and condensed into a manageable form. Secondly two important experimental developments have occurred. The resolution that can be obtained is now of the order of 3 meV, which corresponds approximately to an energy of 30 K. This means that photoelectron spectroscopy can now obtain data with an accuracy similar to that achieved in standard thermodynamic experiments (such as specific heat experiments), thus facilitating a direct comparison of data from the two different types of experiment. The second important experimental advance is that one can now readily measure electron energy distributions over a solid angle of almost 4π . This yields valuable information whenever these electron energy distributions have anisotropies.

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