

Contents

CONTRIBUTIONS TO VOLUME 26.....	vii
PREFACE.....	ix
CONTENTS OF PREVIOUS VOLUMES.....	xi
SUPPLEMENTARY MONOGRAPHS.....	xvi
ARTICLES TO APPEAR SHORTLY.....	xvii

The Calculation of Bloch Functions

J. M. ZIMAN

I. The Basic Problem of Solid State Theory.....	1
II. Mathematical Insights and Physical Concepts.....	15
III. Pseudopotentials.....	39
IV. Augmented Plane Waves and Greenians.....	69
V. Conclusion.....	99

The Calculation of Electronic Energy Bands by the Augmented Plane Wave Method

J. O. DIMMOCK

I. Introduction.....	104
II. The Energy Band Method as an Independent-Electron Model for the Electronic Properties of Solids.....	107
III. The APW Method.....	118
IV. Comparison between the APW Method and Other Methods of Calculating Energy Bands in Solid.....	135
V. Survey of APW Calculations and Results.....	149
VI. Recent and Projected Future Directions.....	252
Appendix I. Bibliography of Papers Pertaining to the APW Methods of Calculating Energy Bands in Solids.....	260
Appendix II. Bibliography of Papers Pertaining to the KKR or Green's Function Method of Calculating Energy Bands in Solids.....	269

Plasmas in Solids

MAURICE GLICKSMAN

I. Introduction.....	275
II. Production of Plasmas.....	291
III. Plasmas Properties.....	318
IV. Instabilities.....	386
V. Conclusions.....	426

Ferroelectricity and Symmetry

I. S. ZHELUDEV

Introduction.....	429
I. Symmetry.....	430
II. Phase Transitions in Ferroelectrics.....	435
III. Domains in Ferroelectrics.....	448
IV. Antiferroelectrics.....	454
V. Conclusions.....	464
 AUTHOR INDEX.....	 465
 SUBJECT INDEX.....	 483