

CONTENTS

	Preface	v
1	The Solid State	1
2	Atomic Structure	10
3	Forces between Atoms	27
4	The Ionic Model	33
5	The Covalent Model	55
6	Mixed Bonds	72
7	Other Limiting Types of Bonds	85
8	A Summary Comparison of Lengths and Strengths of Various Bond Types	97
9	More Complex Crystal Structures	103
10	Isomorphism and Solid Solutions	132
11	Polymorphism	140
12	Defects in Crystals and the Color of Crystals	151
13	The Formation of Crystals	170
14	Chemical Reactions Involving Solids	178
	Further Reading	193
	Index	195