

## CONTENTS

Preface to the series . . . . .	vi
Foreword . . . . .	vii
Contents . . . . .	ix
1. Introduction . . . . .	1
<i>Yu. E. Perlin and M. Wagner</i>	
2. Theoretical background of the Jahn–Teller effect . . . . .	21
<i>I.B. Bersuker and V.Z. Polinger</i>	
3. Group theoretical approaches . . . . .	87
<i>B.R. Judd</i>	
4. Non-adiabatic systems: analytical approach and exact results . . . . .	117
<i>H.G. Reik</i>	
5. Unitary transformation methods in vibronic problems . . . . .	155
<i>M. Wagner</i>	
6. Numerical diagonalization techniques in the Jahn–Teller effect . . . . .	199
<i>D.R. Pooler</i>	
7. Optical bands and polarization dichroism of Jahn–Teller centers. . . . .	251
<i>Yu. E. Perlin and B.S. Tsukerblat</i>	
8. Jahn–Teller effects in optical spectra of II–VI and III–V impurity crystals . . . . .	347
<i>A.L. Natadze, A.I. Ryskin and B.G. Vekhter</i>	
9. Jahn–Teller mercury-like impurities in ionic crystals . . . . .	383
<i>V.V. Hizhnyakov and N.N. Kristoffel</i>	
10. Manifestations of the Jahn–Teller effect in the optical spectra of transition metal impurities in crystals . . . . .	439
<i>W. Ulrici</i>	
11. Phonon scattering at Jahn–Teller defects in semiconductors . . . . .	495
<i>E. Sigmund</i>	
12. Phonon spectroscopy of Jahn–Teller ions . . . . .	533
<i>L.J. Challis and A.M. de Goer</i>	

13. Observation of the Jahn–Teller effect with electron paramagnetic resonance . . . . .	709
<i>H. Bill</i>	
14. Paraelectric resonance of off-center ions . . . . .	819
<i>M.D. Glinchuck</i>	
Author index . . . . .	873
Subject index . . . . .	897