

## CONTENTS

CONTRIBUTORS TO VOLUME 45 . . . . .	vii
FOREWORD . . . . .	ix

### **Electrodynamic Concepts of Wave Interactions in Thin-Film Semiconductor Structures. II**

A. A. BARYBIN

IV. Boundary Conditions on Carrier Stream Surfaces in Nondegenerate Semiconductor Plasmas . . . . .	1
V. Normal Modes in Thin Semiconductor Films without Magnetic Field . . . . .	19
VI. Conclusion . . . . .	36
References . . . . .	37

### **Light-Emitting Devices, Part II: Device Design and Applications**

HERBERT F. MATARÉ

1. Device Design and Technologies . . . . .	40
References for Section 1 . . . . .	69
2. Progress in Laser Technology . . . . .	70
References for Section 2 . . . . .	101
3. Device Types and Technological Progress . . . . .	102
References for Section 3 . . . . .	137
4. Measurement Techniques . . . . .	138
References for Section 4 . . . . .	158
5. Survey of Important Applications . . . . .	158
References for Section 5 . . . . .	200

### **Radar Signal Processing**

G. V. TRUNK

I. Introduction . . . . .	203
II. Coherent Processing . . . . .	204
III. Noncoherent Detection . . . . .	224
IV. Tracking System . . . . .	236
V. Summary . . . . .	249
References . . . . .	250

### **On the Teaching of Electronics to Scientists**

H. E. BERGESON AND GEORGE L. CASSIDAY

I. Introduction . . . . .	253
II. Organization . . . . .	258
III. First Quarter . . . . .	260
IV. Second Quarter . . . . .	278

V. Third Quarter . . . . .	301
VI. Conclusions . . . . .	322
Appendix . . . . .	322
References . . . . .	329
AUTHOR INDEX . . . . .	331
SUBJECT INDEX . . . . .	337
CUMULATIVE AUTHOR INDEX, VOLUMES 1-45 . . . . .	344
CUMULATIVE SUBJECT INDEX, VOLUMES 1-45 . . . . .	373