Optical Properties of Semiconductors

Edited by

G. Martinez

NATO ASI Series

Series E: Applied Sciences - Vol. 228

CONTENTS

Preface

Chapter 1 : The optical response of semiconductors : An overview
G. Martinez 1

Chapter 2 : Electronic structure and dielectric properties of semiconductors
Franco Bassani 27

Chapter 3 : Light scattering spectroscopies in semiconductors
P.Y. Yu 65

Chapter 4 : High resolution photoemission
P. Thiry and Y. Petroff 95

Chapter 5 : Ultrafast dynamics and non linear optical properties of semiconductor quantum wells and superlattices
Benoît Deveaud 119

Chapter 6 : Impurity states in semiconductors
M. Grynberg 159

Chapter 7 : Intra- and interband magneto-optical properties of bulk semiconductors and heterostructures
J.C. Maan 181

Chapter 8 : Optical properties of strongly correlated 2D-electron systems in semiconductors
V.B. Timofeev 209

Chapter 9 : Light detectors
J.N. Patillon 245

Chapter 10: Semiconductor light sources
M-C. Amann 291

Subject index 321