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| 1. Record Nr. | UNIBAS000031262 |
| Titolo | Barojiana / Juan Benet ... [et al.] |
| Pubbl/distr/stampa | Madrid : Taurus, 1972 |
| ISBN | 84-306-0721-8 |
| Descrizione fisica | 176 p. ; 22 cm |
| Collana | Persiles ; 57 |
| Lingua di pubblicazione | Spagnolo |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
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| 2. Record Nr. | UNINA9910464422203321 |
| Autore | Fox Mark |
| Titolo | Optical properties of solids / / Mark Fox |
| Pubbl/distr/stampa | Oxford, [England] : , : Oxford University Press, , 2010
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| ISBN | 0-19-157672-7 |
| Edizione | [Second edition.] |
| Descrizione fisica | 1 online resource (415 p.) |
| Collana | Oxford Master Series in Physics |
| Disciplina | 530.4/12 |
| Soggetti | Solids - Optical properties
Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | ""Contents""; ""1 Introduction""; ""1.1 Classification of optical processes""; ""1.2 Optical coefficients""; ""1.3 The complex refractive index and dielectric constant""; ""1.4 Optical materials""; ""1.4.1 Crystalline insulators and semiconductors""; ""1.4.2 Glasses""; ""1.4.3 Metals""; ""1.4.4 Molecular materials""; ""1.4.5 Doped glasses and insulators""; ""1.5 Characteristic optical physics in the solid state""; ""1.5.1 Crystal symmetry""; ""1.5.2 Electronic bands""; ""1.5.3 Vibronic |

bands""; ""1.5.4 The density of states""; ""1.5.5 Delocalized states and collective excitations""
""1.6 Microscopic models""""Chapter summary""; ""Further reading""; ""Exercises""; ""2 Classical propagation""; ""2.1 Propagation of light in a dense optical medium""; ""2.1.1 Atomic oscillators""; ""2.1.2 Vibrational oscillators""; ""2.1.3 Free electron oscillators""; ""2.2 The dipole oscillator model""; ""2.2.1 The Lorentz oscillator""; ""2.2.2 Multiple resonances""; ""2.2.3 Comparison with experimental data""; ""2.2.4 Local field corrections""; ""2.3 The Kramersa€Kronig relationships""; ""2.4 Dispersion""; ""2.5 Optical anisotropy""; ""2.5.1 Natural anisotropy: birefringence""
""2.5.2 Induced optical anisotropy""""2.6 Optical chirality""; ""Chapter summary""; ""Further reading""; ""Exercises""; ""3 Interband absorption""; ""3.1 Interband transitions""; ""3.2 The transition rate for direct absorption""; ""3.3 Band edge absorption in direct gap semiconductors""; ""3.3.1 The atomic physics of the interband transitions""; ""3.3.2 The band structure of a direct gap IIIa€V semiconductor""; ""3.3.3 The joint density of states""; ""3.3.4 The frequency dependence of the band edge absorption""; ""3.3.5 The Franza€Keldysh effect""
""3.3.6 Band edge absorption in a magnetic field""""3.3.7 Spin injection""; ""3.4 Band edge absorption in indirect gap semiconductors""; ""3.5 Interband absorption above the band edge""; ""3.6 Measurement of absorption spectra""; ""3.7 Semiconductor photodetectors""; ""3.7.1 Photodiodes""; ""3.7.2 Photoconductive devices""; ""3.7.3 Photovoltaic devices""; ""Chapter summary""; ""Further reading""; ""Exercises""; ""4 Excitons""; ""4.1 The concept of excitons""; ""4.2 Free excitons""; ""4.2.1 Binding energy and radius""; ""4.2.2 Exciton absorption""
""4.2.3 Experimental data for free excitons in GaAs""""4.3 Free excitons in external fields""; ""4.3.1 Electric fields""; ""4.3.2 Magnetic fields""; ""4.4 Free excitons at high densities""; ""4.5 Frenkel excitons""; ""4.5.1 Rare gas crystals""; ""4.5.2 Alkali halides""; ""4.5.3 Molecular crystals""; ""Chapter summary""; ""Further reading""; ""Exercises""; ""5 Luminescence""; ""5.1 Light emission in solids""; ""5.2 Interband luminescence""; ""5.2.1 Direct gap materials""; ""5.2.2 Indirect gap materials""; ""5.3 Photoluminescence""; ""5.3.1 Excitation and relaxation""
""5.3.2 Low carrier densities""
