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| Autore                  | Freericks James K                                                                                                                                                                                                                                                                                                                        |
| Titolo                  | Transport in multilayered nanostructures [[electronic resource] ] : the dynamical mean-field theory approach / / James K. Freericks                                                                                                                                                                                                      |
| Pubbl/distr/stampa      | London, : Imperial College Press, c2006                                                                                                                                                                                                                                                                                                  |
| ISBN                    | 1-281-86742-X<br>9786611867423<br>1-61344-772-8<br>1-86094-882-0                                                                                                                                                                                                                                                                         |
| Descrizione fisica      | 1 online resource (xiv, 327 p. ) : ill                                                                                                                                                                                                                                                                                                   |
| Disciplina              | 620.530144                                                                                                                                                                                                                                                                                                                               |
| Soggetti                | Nanostructures - Mathematics<br>Thin films, Multilayered - Mathematics<br>Mean field theory<br>Many-body problem                                                                                                                                                                                                                         |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                  |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                       |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                               |
| Note generali           | Bibliographic Level Mode of Issuance: Monograph                                                                                                                                                                                                                                                                                          |
| Nota di bibliografia    | Includes bibliographical references and index.                                                                                                                                                                                                                                                                                           |
| Nota di contenuto       | Introduction to Multilayered Nanostructures; Dynamical Mean-Field Theory in the Bulk; Dynamical Mean-Field Theory of a Multilayered Nanostructure; Thouless Energy and Normal-State Transport; Josephson Junctions and Superconducting Transport; Thermal Transport; Future Directions; Appendix with Over 35 Problems.                  |
| Sommario/riassunto      | Dealing with Dynamical Mean-Field Theory (DMFT), this book develops the formalism of many-body Green's functions using the equation of motion approach, which requires an undergraduate solid state physics course and a graduate quantum mechanics course as prerequisites. It also emphasizes how to carry out numerical calculations. |