1. Record Nr. UNINA9910257384103321

| | |
|---|---|
| Titolo | Density Functionals: Theory and Applications [[electronic resource] ] : Proceedings of the Tenth Chris Engelbrecht Summer School in Theoretical Physics Held at Meerensee, near Cape Town, South Africa, 19–29 January 1997 / / edited by Daniel Joubert |
| Pubbl/distr/stampa | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1998 |
| ISBN | 3-540-69673-3 |
| Edizione | [1st ed. 1998.] |
| Descrizione fisica | 1 online resource (XVI, 196 p.) |
| Collana | Lecture Notes in Physics, , 0075-8450 ; ; 500 |
| Disciplina | 530.4/11 |
| Soggetti | Mathematical physics<br>Chemistry, Physical and theoretical<br>Condensed matter<br>Atoms<br>Physics<br>Theoretical, Mathematical and Computational Physics<br>Theoretical and Computational Chemistry<br>Condensed Matter Physics<br>Atomic, Molecular, Optical and Plasma Physics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Bibliographic Level Mode of Issuance: Monograph |
| Nota di contenuto | Fundamentals of density functional theory -- Density functionals for non-relativistic coulomb systems -- Hybrid methods: Combining density functional and wavefunction theory -- Density polarization functional theory -- A guided tour of time-dependent density functional theory -- Relativistic density functional theory. |
| Sommario/riassunto | This book is an excellent introduction to density functional theory for electrons. Largely written in review style, it will also serve as an excellent overview of recent developments. Nonrelativistic and relativistic approaches are discussed and conventional ground-state as well as polarization density functional and time-dependent density functional formalisms are introduced. A careful discussion of the exchange-correlation functional and approximations is presented and a |

chapter is devoted to an analysis of hybrid wavefunction/density-functional approximations.