

1. Record Nr.	UNINA9910458172603321
Titolo	Recent advances in density functional methods . Part III [[electronic resource] /] / edited by Vincenzo Barone, Alessandro Bencini, Piercarlo Fantucci
Pubbl/distr/stampa	Singapore ; ; River Edge, N.J., : World Scientific, 2002
ISBN	981-277-816-0
Descrizione fisica	1 online resource (432 p.)
Collana	Recent advances in computational chemistry ; ; v. 1
Altri autori (Persone)	BaroneVincenzo BenciniAlessandro <1951-> FantucciPiercarlo
Disciplina	542.85
Soggetti	Density functionals Quantum chemistry Electronic structure 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 ; Preface ; Theoretical Study of the Transition-Metal Silonyl Complexes M-SiO and M-(SiO) ₂ : M = Cu Ag or Au ; 1 Introduction ; 2 Results and Discussion ; 3 Concluding Remarks ; References Local Relaxation for Mn ²⁺ and Fe ³⁺ Impurities in Fluoroperovskites: Density Functional Study 1 Introduction ; 2 Theoretical ; 3 Results and discussion ; 4 Acknowledgement ; 5 References Theoretical Exploration of Single and Multi State Femtosecond Nuclear Dynamics of Small Metallic Clusters Using the DF Method 1 Introduction ; 2 Computational ; 3 Results and Discussion of Dynamics of Li ⁺ ₉ Cluster ; 4 Multi State Dynamics of Ag ⁴⁻ /Ag ₄ /Ag ₄ ⁺ ; 5 Conclusion ; References Applications of Density Functional Theory in Solid State Chemistry

1 Introduction ; 2 Spin States in Bimetallic Clusters: Effects on Structure and Energetics ; 3 Electronic Structure Magnetic Ordering in BEDT-TTF Charge Transfer Salts ; 3.1 Isolated Molecules ; 3.2 Periodic Systems ; 4 Peroxy Species: Environmental and Electron Correlation Effects ; 4.1 Crystalline Ionic Peroxide Materials ; 4.2 Peroxy Species in Bulk Zeolites and Related Materials ; 5. Conclusion ; 6 Acknowledgements ; References ; A Hybrid Functional for the Exchange-Correlation Kernel in Time-Dependent Density Functional Theory

Sommario/riassunto

In the last few years, much attention has been given by theoretical chemists to the development of more accurate model functionals and faster computational techniques including excited electronic states. The 8th International Conference on the Applications of Density Functional Theory to Chemistry and Physics, held in Rome, Italy, on 6-10 September 1999, gathered chemists and physicists to present and discuss state-of-the-art methodological developments and applications of density functional theory (DFT) to increasingly complex systems. The scientists shared their knowledge and experience in
