

1.	Record Nr.	UNISA990003048490203316
	Autore	HUBY, Pamela
	Titolo	Vol. 2: Logic / by Pamela Huby ; with contributions on the Arabic material by Dimitri Gutas
	Pubbl/distr/stampa	Leiden ; Boston : Brill, 2007
	ISBN	90-04-15298-9 978-90-04-15298-9
	Descrizione fisica	XIII, 208 p. ; 25 cm
	Collana	Philosophia antiqua ; 103
	Collocazione	II.1.A. 1438 2
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910139037703321
	Titolo	Post-perovskite [[electronic resource]] : the last mantle phase transition / / Kei Hirose ... [et al.], editors
	Pubbl/distr/stampa	Washington, DC, : American Geophysical Union, c2007
	ISBN	1-118-67193-7 1-118-66640-2 1-118-67249-6
	Descrizione fisica	1 online resource (297 p.)
	Collana	Geophysical monograph series, , 0065-8448 ; ; 174
	Altri autori (Persone)	HiroseKei
	Disciplina	551.1/16
	Soggetti	Perovskite (Mineral) Oxide minerals
	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.

Nota di contenuto

Title Page; Contents; Preface; An Introduction to Post-Perovskite: The Last Mantle Phase Transition; Section I: Mineral Physics (Experimental); Review of Experimental Studies on Mantle Phase Transitions; Discovery of Post-Perovskite Phase Transition and the Nature of D. Layer; Effect of Iron on the Properties of Post-Perovskite Silicate; Electronic Transitions and Spin States in the Lower Mantle; Lattice-Preferred Orientation of Lower Mantle Materials and Seismic Anisotropy in the D. Layer; Section II: Mineral Physics (Theoretical) Thermodynamic Properties and Stability Field of MgSiO_3 Post-Perovskite The High-Temperature Elasticity of MgSiO_3 Post-Perovskite; Effect of Chemistry on the Physical Properties of Perovskite and Post-Perovskite; Section III: Seismology; Reconciling the Post-Perovskite Phase With Seismological Observations of Lowermost Mantle Structure; Predicting a Global Perovskite and Post-Perovskite Phase Boundary; Seismic Anisotropy of Post-Perovskite and the Lowermost Mantle; Constraints on the Presence or Absence of Post-Perovskite in the Lowermost Mantle From Long-Period Seismology; Section IV: Dynamics Mantle Dynamics and the D'' Layer: Impacts of the Post Perovskite Phase Influence of the Post-Perovskite Transition on Thermal and Thermo-Chemical Mantle Convection; The Dynamical Influences From Physical Properties in the Lower Mantle and Post-Perovskite Phase Transition; Deformation-Induced Mechanical Instabilities at the Core-Mantle Boundary

Sommario/riassunto

Published by the American Geophysical Union as part of the Geophysical Monograph Series, Volume 174. Discovery of the perovskite to post-perovskite phase transition in MgSiO_3 , expected to occur for deep mantle conditions, was first announced in April 2004. This immediately stimulated numerous studies in experimental and theoretical mineral physics, seismology, and geodynamics evaluating the implications of a major lower mantle phase change. A resulting revolution in our understanding of the D'' region in the lowermost mantle is well underway. This monograph presents the
