

1. Record Nr.	UNINA9910780888603321
Autore	Winterberg Friedwardt <1929->
Titolo	The release of thermonuclear energy by inertial confinement [[electronic resource]] : ways towards ignition / / Friedwardt Winterberg
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, c2010
ISBN	1-282-76356-3 9786612763564 981-4295-91-4
Descrizione fisica	1 online resource (436 p.)
Disciplina	539.764
Soggetti	Inertial confinement fusion
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	Preface; Overview; Contents; List of Figures; List of Tables; 1 Introduction; 2 Nuclear Fission and Fusion Reactions; 3 The Thermonuclear Plasma; 4 Collision Processes in Thermonuclear Plasmas; 5 Shock and Compression Waves; 6 Thermonuclear Ignition and Burn; 7 Ignition by Fission Explosives; 8 Non-Fission Ignition; 9 Thermonuclear Lenses and Shaped Charges; 10 The Significance of Thermonuclear Microexplosions for Fundamental Research; 11 Recent Developments; 12 The Future A Comparison of the Recently Proposed Super Marx Generator Approach to Thermonuclear Ignition with the DT Laser Fusion-Fission Hybrid Concept by the Lawrence Livermore National Laboratory About the Author; Index
Sommario/riassunto	This is a comprehensive book which describes the three essential parts of what is known as 'Inertial Confinement Fusion': the way thermonuclear burn takes place in non-magnetized, magnetized and fusion-fission hybrid assemblies; the pulse power ignition technology (nuclear, electrical, optical and chemical); and, the applications of inertial confinement fusion technology for peaceful nuclear energy on Earth and in space. An integrated single text of such extensive technical width is a rare find, and younger generations of nuclear

engineers any physicists will appreciate this book as a companio
