

1. Record Nr.	UNINA9910970935803321
Titolo	Frontiers in high energy density physics : the x-games of contemporary science / / Committee on High Energy Density Plasma Physics, Plasma Science Committee, Board on Physics and Astronomy, Division on Engineering and Physical Sciences, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, 2003
ISBN	9786610182961 9780309168830 030916883X 9781280182969 1280182962 9780309513609 030951360X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (177 p.)
Disciplina	530.4
Soggetti	Plasma (Ionized gases) Energy level densities Plasma density Plasma astrophysics Laser-plasma interactions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Executive Summary""; ""1 Exordium and Principal Findings and Recommendations""; ""2 High Energy Density Astrophysics""; ""3 High Energy Density Laboratory Plasmas""; ""4 Laser-Plasma and Beam-Plasma Interactions""; ""Glossary""
Sommario/riassunto	Recent scientific and technical advances have made it possible to create matter in the laboratory under conditions relevant to astrophysical systems such as supernovae and black holes. These advances will also benefit inertial confinement fusion research and the nation (TM)s

nuclear weapon (TM)s program. The report describes the major research facilities on which such high energy density conditions can be achieved and lists a number of key scientific questions about high energy density physics that can be addressed by this research. Several recommendations are presented that would facilitate the development of a comprehensive strategy for realizing these research opportunities.
