Record Nr. UNINA9910458073203321 Autore McCracken G. M. Titolo Fusion [[electronic resource]]: the energy of the universe / / Garry McCracken and Peter Stott Burlington, MA,: Elsevier Academic Press, c2005 Pubbl/distr/stampa **ISBN** 1-281-00549-5 9786611005498 0-08-049271-1 Descrizione fisica 1 online resource (224 p.) Collana Complementary science series Altri autori (Persone) StottP. E (Peter E.) Disciplina 539.7/64 Soggetti Nuclear fusion Nuclear reactions 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 (p. 177-180) and index. Nota di contenuto Chapter 1 What Is Nuclear Fusion?; Chapter 2 Energy from Mass; Chapter 3 Fusion in the Sun and Stars; Chapter 4 Man-Made Fusion; Chapter 5 Magnetic Confinement; Chapter 6 The Hydrogen Bomb; Chapter 7 Inertial-Confinement Fusion; Chapter 8 False Trails; Chapter 9 Tokamaks; Chapter 10 From T3 to ITER; Chapter 11 Fusion Power Plants; Chapter 12 Why We Need Fusion Energy; Epilogue; Units; Glossary: Further Reading: Index Unraveling the role of fusion in the universe has taken almost a century Sommario/riassunto since Einstein's proof of the equivalence of energy and matter in 1905. The discovery that fusion reactions are responsible for the building of the light elements in the ""Big Bang"" and the subsequent development of the heavier elements in the stars and in exploding supernovae is one of the field's most exciting successes. In this engaging book, McCracken and Stott reexamine these discoveries in astrophysics and discuss the possibility that fusion reactions are not only our sun's

source of power, but may also be indu