Record Nr. UNINA9910826070403321 Megagauss magnetic field generation, its application to science and **Titolo** ultra-high pulsed-power technology: proceedings of the VIIIth International Conference on Megagauss Magnetic Field Generation and Related Topics: Tallahassee, Florida, USA, 18-23 October 1998 / / edited by Hans J. Schneider-Muntau New Jersey;; London,: World Scientific, c2004 Pubbl/distr/stampa **ISBN** 1-281-89856-2 9786611898564 981-270-251-2 Edizione [1st ed.] 1 online resource (749 p.) Descrizione fisica Altri autori (Persone) Schneider-MuntauHans J Disciplina 538.72 538/.3 Soggetti Magnetic fields Pulsed power systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali "Megagauss VIII was held in connection with the conference "Physical Phenomena at High Magnetic Fields - III" (PPHMF-III) in order to encourage and facilitate cross-links between the two scientific communities"--p. xiii. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto DEDICATED TO THE 80th BIRTHDAY OF MAX FOWLER; EDITOR'S PREFACE: INTERNATIONAL STEERING COMMITTEE: PROGRAM COMMITTEE; LOCAL ORGANIZING COMMITTEE; SPONSORING ORGANIZATIONS; TABLE OF CONTENTS; OVERVIEWS AND LECTURES; GENERATION OF MEGAGAUSS MAGNETIC FIELDS Ultra - High Magnetic Fields; GENERATION OF MEGAGAUSS MAGNETIC FIELDS Non-Destructive High Magnetic Fields/Conductor Development; GENERATION OF MEGAGAUSS MAGNETIC FIELDS High Magnetic Fields in Small Volumes; SCIENCE IN MEGAGAUSS MAGNETIC FIELDS; PLASMAS, MAGNETIZED PLASMAS, FUSION; RAILGUNS, LAUNCHERS, AND RELATED **TOPICS** EXPLOSIVE ULTRA-HIGH PULSED POWER GENERATORSIMPLODING LINERS; CODES, ANALYSIS, SIMULATIONS; SWITCHES AND OTHER; HIGH

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Sommario/riassunto

The generation of megagauss fields for science and technology is an exciting area at the extremes of parameter space, involving the application and controlled handling of extremely high power and energy densities in small volumes and on short time scales. New physical phenomena, technological challenges, and the selection and development of materials, together create a unique potential and synergy resulting in fascinating discoveries and achievements. This book is a collection of the contributions of an international conference, which assembled the leading scientists and engineers worldwide wo