



Few-Cycle Laser Pulse Generation and Its Applications

By Franz X. Kärtner

Springer-Verlag GmbH Sep 2004, 2004. Buch. Condition: Neu. Neuware - This book covers the physics, technology and applications of short pulse laser sources that generate pulses with durations of only a few optical cycles. The basic design considerations for the different systems such as lasers, parametric amplifiers and external compression techniques which have emerged over the last decade are discussed to give researchers and graduate students a thorough introduction to this field. The existence of these sources has opened many new fields of research that were not possible before. These are UV and EUV generation from table-top systems using high-harmonic generation, frequency metrology enabling optical frequency counting, high-resolution optical coherence tomography, strong-field ultrafast solid-state processes and ultrafast spectroscopy, to mention only a few. Many new applications will follow. The book attempts to give a comprehensive, while not excessive, introduction to this exciting new field that serves both experienced researchers and graduate students entering the field. The first half of the book covers the current physical principles, processes and design guidelines to generate pulses in the optical range comprising only a few cycles of light. Such as the generation of relatively low energy pulses at high repetition rates directly from the laser,...

[DOWNLOAD](#)



[READ ONLINE](#)

[1.1 MB]

Reviews

It becomes an incredible book that we actually have possibly study. It really is rally exciting through studying period of time. I am very easily could get a satisfaction of reading through a written book.

-- Gianni Hoppe

A really awesome pdf with perfect and lucid reasons. It is actually rally fascinating through reading period of time. Your lifestyle period will probably be transform as soon as you total looking over this ebook.

-- Alford Kihn