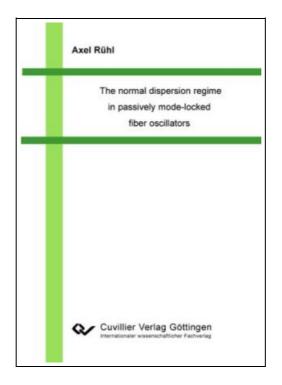
The normal dispersion regime in passively mode-locked fiber oscillators



Filesize: 2.16 MB

Reviews

It becomes an incredible ebook which i have at any time go through. It normally fails to charge excessive. Your daily life period will be enhance the instant you full reading this article book. (Alize Bashirian I)

THE NORMAL DISPERSION REGIME IN PASSIVELY MODE-LOCKED FIBER OSCILLATORS



To save **The normal dispersion regime in passively mode-locked fiber oscillators** eBook, you should access the link listed below and download the file or gain access to other information that are relevant to THE NORMAL DISPERSION REGIME IN PASSIVELY MODE-LOCKED FIBER OSCILLATORS book.

Cuvillier Verlag Dez 2008, 2008. Taschenbuch. Condition: Neu. Neuware - The subject of this thesis is the development and study of passively modelocked fiber oscillators operating in the normal dispersion regime. Inspired by the concept of similariton amplifiers, pulse evolution towards a similariton opened new perspectives for fiber oscillators. In contrast to solitary laser oscillators, pulse shaping towards similaritons offers the possibility of significant energy scaling because of strongly chirped intracavity dynamics while the pulses can be efficiently compressed outside the cavity. These properties make fiber oscillators in the normal dispersion regime versatile femtosecond light sources whose performance can be tailored for various applications. Ytterbium- and erbium-doped fiber oscillators mode-locked by nonlinear polarization evolution were set up and utilized for the study of this pulse regime. The oscillators exhibit promising performances and the pulse energy could be significantly scaled compared to previous concepts. Supported by numerical simulations, various aspects of the intracavity pulse formation and its targeted influence were investigated. Based on the analysis of the intracavity pulse dynamics, the role of dissipative effects in the formation of a stable steady-state was pointed out and its influence on the frequency as well as on the temporal domain was investigated. Filtering in the frequency domain cannot only be provided by spectral filters and a limited gain bandwidth, but also by intrapulse Raman-scattering. By using additional mode-locking mechanisms constituting nonlinear temporal filters, the ouput characteristic could be significantly tuned and the increased self-starting capability gives access to various cavity designs. The impact of dispersion also allows the adaption and optimization of laser parameters. Changes of the output characteristic for varying group-delay dispersion were addressed and its limits were discussed. Furthermore, the self acting nonlinear compensation of third-order dispersion was experimentally demonstrated for the first time and verified by numerical simulations. Beside experimental...

Read The normal dispersion regime in passively mode-locked fiber oscillators Online
Download PDF The normal dispersion regime in passively mode-locked fiber oscillators

Other Kindle Books

ſ	

[PDF] A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half Access the web link listed below to get "A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half" file.

Read Document »

[PDF] The Forsyte Saga (The Man of Property; In Chancery; To Let) Access the web link listed below to get "The Forsyte Saga (The Man of Property; In Chancery; To Let)" file. Read Document »

ſ		
l	_	

[PDF] Read Write Inc. Phonics: Orange Set 4 Storybook 2 I Think I Want to be a Bee Access the web link listed below to get "Read Write Inc. Phonics: Orange Set 4 Storybook 2 I Think I Want to be a Bee" file. Read Document »

[PDF] Your Pregnancy for the Father to Be Everything You Need to Know about Pregnancy Childbirth and Getting Ready for Your New Baby by Judith Schuler and Glade B Curtis 2003 Paperback Access the web link listed below to get "Your Pregnancy for the Father to Be Everything You Need to Know about Pregnancy Childbirth and Getting Ready for Your New Baby by Judith Schuler and Glade B Curtis 2003 Paperback" file. Read Document »

- 1

[PDF] Daddyteller: How to Be a Hero to Your Kids and Teach Them What s Really by Telling Them One Simple Story at a Time

Access the web link listed below to get "Daddyteller: How to Be a Hero to Your Kids and Teach Them What's Really by Telling Them One Simple Story at a Time" file.

Read Document »

_

[PDF] Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America.

Access the web link listed below to get "Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America." file.

Read Document »