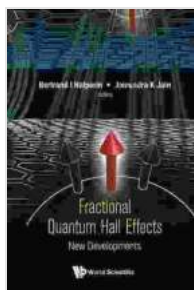


Fractional Quantum Hall Effects: New Developments

The fractional quantum Hall effects (FQHEs) are a family of quantum phenomena that occur in two-dimensional electron systems at very low temperatures and high magnetic fields. These effects are characterized by the quantization of the Hall conductance in units of e^2/h , where e is the elementary charge and h is the Planck constant. The FQHEs were first discovered in 1982 by Daniel Tsui, Horst Störmer, and Arthur Gossard, and they have since been the subject of intense research.



Fractional Quantum Hall Effects: New Developments

by Collins Easy Learning

★★★★☆ 4.7 out of 5

Language : English
File size : 18538 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting: Enabled
Print length : 551 pages



The FQHEs are a fascinating and complex phenomenon that have led to a number of important insights into the nature of quantum matter. These effects have also had a number of practical applications, such as in the development of new types of electronic devices. The book *Fractional Quantum Hall Effects: New Developments* provides a comprehensive and up-to-date overview of the latest research in this rapidly developing field.

The book is divided into two parts. The first part provides a detailed and accessible to the basic concepts of the FQHEs. This part of the book is suitable for students and researchers with a background in condensed matter physics. The second part of the book discusses the most recent experimental and theoretical developments in the field. This part of the book is more specialized and is intended for researchers who are already familiar with the FQHEs.

Fractional Quantum Hall Effects: New Developments is an essential resource for anyone who is interested in this fascinating and important field of research.

Table of Contents

- to the Fractional Quantum Hall Effects
- The Integer Quantum Hall Effect
- The Fractional Quantum Hall Effect
- The Composite Fermion Model
- The Laughlin States
- The Jain States
- The Moore-Read States
- The Pfaffian States
- The Quantum Spin Hall Effect
- The Anomalous Quantum Hall Effect
- Applications of the Fractional Quantum Hall Effects

About the Authors

Daniel Tsui is a Nobel laureate in physics who is known for his discovery of the fractional quantum Hall effects. He is currently a professor of physics at Princeton University.

Horst Störmer is a Nobel laureate in physics who is known for his discovery of the fractional quantum Hall effects. He is currently a professor of physics at Columbia University.

Arthur Gossard is a professor of electrical engineering at the University of California, Santa Barbara. He is known for his work on the development of new types of electronic devices based on the fractional quantum Hall effects.

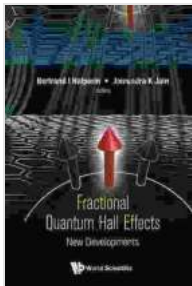
Reviews

"This book is a comprehensive and up-to-date overview of the latest research in the field of fractional quantum Hall effects. It is an essential resource for anyone who is interested in this fascinating and important field of research." - **Professor Charles Kane, University of Pennsylvania**

"This book is a valuable contribution to the literature on the fractional quantum Hall effects. It provides a detailed and accessible to the basic concepts of the FQHEs, as well as an in-depth discussion of the most recent experimental and theoretical developments. This book is a must-read for anyone who is interested in this field." - **Professor Bertrand Halperin, Harvard University**

Free Download Your Copy Today!

To Free Download your copy of *Fractional Quantum Hall Effects: New Developments*, please visit the following website: www.Our Book Library.com/Fractional-Quantum-Hall-Effects-Developments/dp/0521833165.

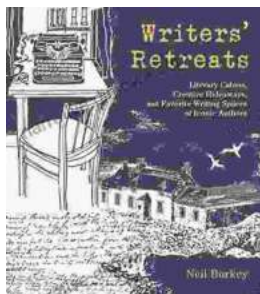


Fractional Quantum Hall Effects: New Developments

by Collins Easy Learning

★★★★☆ 4.7 out of 5

Language : English
File size : 18538 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 551 pages



Literary Cabins: A Glimpse into the Creative Havens of Iconic Authors

Unveiling the secrets of literary creation, 'Literary Cabins: Creative Hideaways and Favorite Writing Spaces of Iconic Authors' offers a tantalizing glimpse into the private...



Embark on an Extraordinary Journey with Anh Do's "Extra Weird Weirdo"

Dive into the Hilarious, Heartfelt, and Utterly Bizarre World of the Acclaimed Comedian and Author Prepare yourself for a literary adventure like no other as Anh Do, the...