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Nota di contenuto	Introduction -- Fundamentals of Quantum Hall Physics and Relevant Experiments -- Setup and Sample Optimization -- Quantum Point Contact Experiments -- Quantum Dot and Interferometer Experiments -- Conclusion.
Sommario/riassunto	This book provides an overview of recent developments in experiments probing the fractional quantum Hall (FQH) states of the second Landau level, especially the \nu=5/2 state. It summarizes the state-of-the-art understanding of these FQH states. It furthermore describes how the properties of the FQH states can be probed experimentally, by investigating tunneling and confinement properties. The progress towards the realization of an experiment, allowing to probe the potentially non-Abelian statistics of the quasiparticle excitations at \nu=5/2 is discussed. The book is intended as a reference for graduate students, PostDocs and researchers starting in the field. The experimental part of this book gives practical advice for solving the

experimental challenges which researchers studying highly fragile FQH states are faced with.