

1. Record Nr.	UNISA996490346203316
Autore	Li Yusheng
Titolo	Elementary Methods of Graph Ramsey Theory [[electronic resource] /] / by Yusheng Li, Qizhong Lin
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-12762-5
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (349 pages)
Collana	Applied Mathematical Sciences, , 2196-968X ; ; 211
Disciplina	511.5
Soggetti	Graph theory Discrete mathematics Probabilities Graph Theory Applications of Discrete Mathematics Probability Theory Teoria de Ramsey Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Existence -- Small Ramsey Numbers -- Basic Probabilistic Method -- Random Graph -- Lovász Local Lemma -- Constructive Lower Bounds -- Turán Number and Related Ramsey Number -- Communication Channels -- Dependent Random Choice -- Quasi-Random Graphs -- Regularity Lemma and van der Waerden Number -- More Ramsey Linear Functions -- Various Ramsey Problems.
Sommario/riassunto	This book is intended to provide graduate students and researchers in graph theory with an overview of the elementary methods of graph Ramsey theory. It is especially targeted towards graduate students in extremal graph theory, graph Ramsey theory, and related fields, as the included contents allow the text to be used in seminars. It is structured in thirteen chapters which are application-focused and largely independent, enabling readers to target specific topics and information to focus their study. The first chapter includes a true beginner's overview of elementary examples in graph Ramsey theory mainly using

combinatorial methods. The following chapters progress through topics including the probabilistic methods, algebraic construction, regularity method, but that's not all. Many related interesting topics are also included in this book, such as the disproof for a conjecture of Borsuk on geometry, intersecting hypergraphs, Turán numbers and communication channels, etc.
